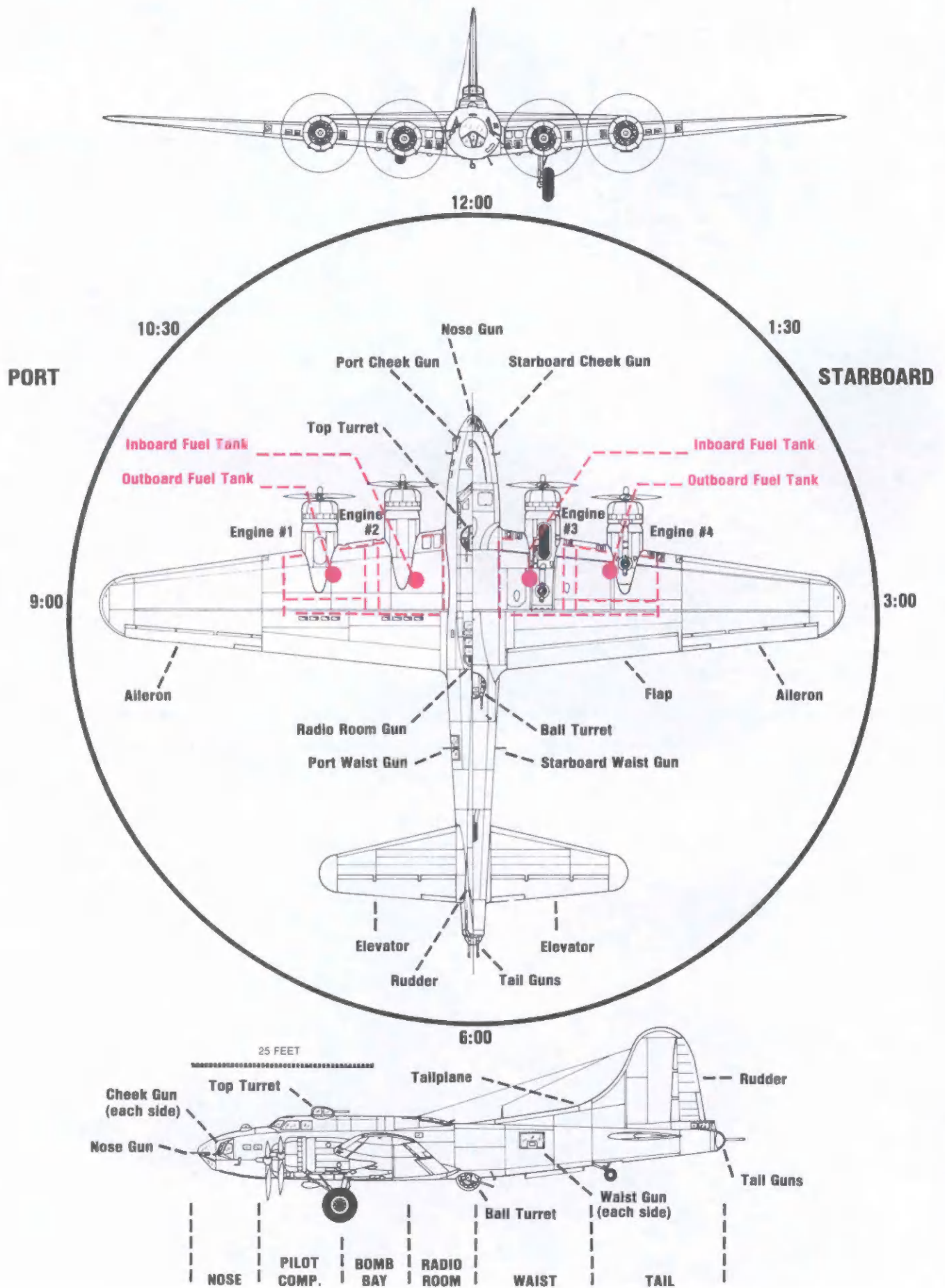# B·17

Queen of the Skies

THE AVALON HILL GAME COMPANY'S TRADEMARK FOR ITS WWII AERIAL COMBAT GAME

QUEEN OF THE SKIES

FOR AGES
8 AND UP

© JOE DE MARCO

The Avalon Hill Game Company

AH
GAMES OF
STRATEGY

B-17
Queen of the Skies

Rules Folder

12:00

10:30

1:30

PORT

STARBOARD

Nose Gun

Port Cheek Gun

Starboard Cheek Gun

Top Turret

Inboard Fuel Tank

Inboard Fuel Tank

Outboard Fuel Tank

Outboard Fuel Tank

Engine #1

Engine #2

Engine #3

Engine #4

9:00

3:00

Aileron

Flap

Aileron

Radio Room Gun

Ball Turret

Port Waist Gun

Starboard Waist Gun

Elevator

Elevator

Rudder

Tail Guns

6:00

25 FEET

Tailplane

Rudder

Cheek Gun
(each side)

Top Turret

Nose Gun

Tail Guns

Ball Turret

Waist Gun
(each side)

NOSE

PILOT
COMP.

BOMB
BAY

RADIO
ROOM

WAIST

TAIL

2

B-17: QUEEN OF THE SKIES

PART I: RULES OF PLAY

1.0 INTRODUCTION

B-17: QUEEN OF THE SKIES re-creates World War II bombing missions of the famous 8th Air Force Flying Fortresses during the period of November 1942 to May 1943. This was a trial period for the proponents of strategic daylight bombing. The green crews had to prove the value of this concept as well as the fitness of themselves and their equipment. During these early months, both the bombers and their German air defense counterparts were evenly matched, with each side experimenting, learning, and looking for an advantage.

B-17 is designed as a solitaire game, with the player acting for the crew of an individual bomber. The actions of the German air defenses and the fate of the bomber and crew are randomly generated by various game aids and tables. Each "game" consists of a single bombing mission. The ultimate goal is to safely complete 25 missions thereby earning a ticket home to a relatively safe job. In practice, this is rarely achieved and players should instead try to complete 25 missions with a minimum number of bombers and crewmen lost.

Because of the nature of the solitaire play system, **B-17** makes extensive use of game aids and tables as a substitute for a live German air defense player. Before attempting to fly a mission, the player should examine all of the game's components. Their purpose should be apparent. This rules booklet has been divided into three parts. This first part is the standard game rules which explain in detail how to play. The second part is the step by step description of an actual game mission, which serves as a programmed instruction and example of play. Part III consists of additional notes, bibliography, and credits. New players should read Part I through section 7.0, How to Win, and then read through the sample mission. Experienced game players should find that this will be enough information to get started, and can refer to the detailed rules for special cases. Before starting the 25 mission campaign, it is suggested that a few practice missions be flown to random targets to learn the game system.

2.0 GAME EQUIPMENT

2.1 B-17 MAPBOARD

The principle area of play for **B-17** is the $11'' \times 16''$ mounted mapboard. The top half of the mapboard is a depiction of a B-17 in flight, with a landscape visible below. This part of the board is used to resolve combat between German fighters and the B-17. The lower half of the board displays various tables which will be consulted often during combat.

2.2 B-17 STRATEGIC MOVEMENT BOARD

This map of northwestern Europe shows the area of B-17 bombing missions during the time period covered by the game. Marked on the map are all of the potential target cities, and the 8th Air Force Base in England. The strategic area shown is divided into concentric zones expanding out from the base, each approximately 50 miles apart. Under normal conditions, the B-17 travels one zone per turn. When its speed is reduced by damage, the B-17 may need two turns to travel one zone. (Regardless of damage, a B-17 will never spend more than two turns in a zone.)

2.3 CREW PLACEMENT BOARD

This board displays the interior of the B-17, and shows where the various crew members are placed. During play, the wounds and position changes of crew members will be marked here.

2.4 TABLES AND CHARTS CARDS

The five colored cards display most of the charts and tables which are used to generate the various random events of a typical bombing mission. The use of the tables is explained in section 3.0, Game Tables in Play.
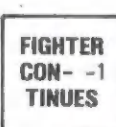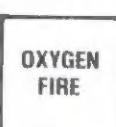
2.5 GERMAN FIGHTER CARDS

There are 16 German fighter cards of three different types: the Messerschmitt 109 (Me 109), Messerschmitt 110 (Me 110), and Focke-Wulf 190 (FW 190). These fighter cards will be placed on the B-17 Mapboard when called for to represent fighters attacking the B-17.

2.6 DIE CUT COUNTERSHEET

The 88 die cut counters are used in play to mark the position of the B-17 on the Strategic Movement Board, the position of the B-17 crew on the Crew Placement Board, the targets of the various B-17 machine guns, damage to the B-17, damage to the German fighters, and wounds to the B-17 crew.

SAMPLE COUNTERS

Counter	Label
B-17 POSITION	B-17 Position
	Bombardier
BALL TURRET MG's	Ball Turret MG's
	Engine Fire
FUEL TANK FIRE BAILOUT	Fuel Tank Fire
	Oil Leak
GAS LEAK 1st	Gas Leak
	Fighter Continues Attack FCA
FIGHTER BREAKS OFF -2	Fighter Breaks Off Attack FBOA
	Oxygen Fire
EXTIN-GUISHER	Fire Extinguisher
	Rudder Inoperable

LIGHT WOUND — Light Wound

GREEN — Green Pilot

ACE — Ace Pilot

SPRAY FIRE — Area Spray Fire

2.7 MISSION CHART PAD

The events of each mission are recorded as they unfold on a Mission Chart. The pad in **B-17** includes enough charts for 70 missions. An example of how the Mission Chart can be used is included with the sample mission in Part II of this rulebook.

2.8 COMPOSITE MISSION RECORD

At the back of the Mission Chart Pad are two Composite Mission Records. These charts are used to record the results of each of the 25 missions of the Campaign Game. The composite record has space to note personnel changes, bomber losses, and the percentage of bombs on target.

3.0 GAME TABLES IN PLAY

Due to the nature of **B-17**'s solitaire play system, extensive use of various tables has been necessary to generate the many possible events that could occur during a typical bombing mission. The tables which will be consulted during play are found on the separate colored cards and on the mounted game mapboard.

3.1 LOCATING THE TABLES

Each table included in the game has been given a letter-number designation, and a descriptive name. For example, the table which details shell hit damage in the B-17's Bomb Bay section is labeled **P-3 BOMB BAY**. The letter half of the designation indicates whether the table is on the mapboard or on a card, as follows:

—M = Mounted mapboard;
—O = Orange card;
—P = Pink card;
—B = Buff card;
—BL = Blue card;
—G = Green card;

If the table is on the mapboard or on a card, the number designation is the number of that table on the card or board. For example, Bomb Bay Table P-3 is the third table on the Pink card. A complete list of the tables in **B-17** is included on the back page of the rulebook.

3.2 USING THE TABLES

The game tables are used by rolling one or two six-sided dice and reading the result generated off of the table. Throughout the game the notation "1D" means roll one die when consulting this table, and the notation "2D" means roll two dice. Tables G-3 and B-3 are special cases. When rolling "2D" on these tables, treat the first die as the 10's digit and the second die as the 1's digit of a 2 digit number. Rolling two dice on these tables will thus generate 36 different random numbers ranging from a low of "11" to a high of "66".

4.0 PLACING THE GAME EQUIPMENT

Before beginning, the player should organize the various game components in front of himself in a manner that will facilitate reference. The Mission Chart, the mounted mapboard, and the Crew Placement Board should be readily accessible. The player will be constantly making notes on the first, and the game counters will be in play on the latter two. The remaining game counters and fighter cards should also be close enough to be distinguished when needed. The other components do not have to placed where they are readable, but must be within reach.

4.1 FIGHTER CARDS

The three different types of German fighter cards should be stacked to the side of the mapboard until called for. When a wave of fighters is generated from Table B-3, bring a fighter of the correct type into play as follows:

—If a German fighter is attacking from a *high* position, place its card on the landscape portion of the mapboard in its designated clock position.

—If the fighter is attacking from a *level* position, place its card on the blue border of the mapboard in its designated clock position.

—If the fighter is attacking from a *low* position, place its card just off the edge of the mapboard in its designated clock position.

—If the fighter is attacking from a *vertical dive*, place its card directly on top of the B-17 on the mapboard.

—If the fighter is attacking from a *vertical climb*, place its card on the blue border of the mapboard in the lower left corner marked "Vertical Climb".

4.2 GAME COUNTERS

At the beginning of the mission, place all crew and fire extinguisher counters in their appropriate places on the Crew Placement Board. The B-17 counter is placed in the 8th Air Force Base space on the Strategic Movement Board.

The remaining counters are placed aside within reach until needed. The FCA and FBOA counters mark damage to enemy fighters. When called for, they are placed directly on top of the damaged fighter's card. Counters detailing damage to the B-17 are placed directly on the B-17 Mapboard on the location of the damage. For example, if a fuel tank on the Port Wing is leaking, a fuel tank leak counter is placed on the Port Wing. The machine gun counters are placed on the fighter which the gun is firing at when defensive fire is allocated. Wound counters are placed on the Crew Placement Board to mark wounded crewmen.

5.0 SEQUENCE OF PLAY

5.1 PRE-MISSION STEPS

a. Be sure the B-17 has a name and full crew recorded on the Composite Mission Record and the Mission Chart. Place all crew counters in the appropriate positions on the Crew Placement Board, and have the Strategic Movement Board, game mapboard, playing counters, and all rules and tables at hand.

b. Roll for the mission target city on either Table G-1, G-2, or G-3 (depending on the number of the mission) and record it on the Composite Mission Record and the Mission Chart.

c. Roll for the B-17's position in its squadron (Lead bomber, tail bomber, or in the middle) on Table G-4 and check the corresponding box on the MC. Note that bombers in the lead or tail positions are attacked by an additional fighter per German fighter wave as indicated on the MC.

d. Roll for the B-17's squadron formation (High, middle, or low squadron) on Table G-4 and check the corresponding box on the Mission Chart. Note any modifications to the rolls for enemy fighters on Tables B-1 and B-2 due to the B-17's squadron formation. (The low squadron was most prone to German attack, while the middle squadron was least prone to attack.)

e. Examine the Flight Log Gazetteer, Chart G-11, to find the modifications in each zone to the rolls for enemy fighters on Tables B-1 and B-2. Add these modifications with any for the B-17's squadron position and note them on the Mission Chart.

f. Place the B-17 counter on the Strategic Mission Board inside the map square labelled "8th Air Force Base", facing in the direction of the target city. The mission is ready to begin.

5.2 MISSION STEPS

a. Each turn, move the B-17 counter one zone closer to the zone containing the target (or one zone closer to the base when returning after bombing the target).

b. Roll for fighter cover on Table G-5 (either Poor, Fair, or Good) and record the extent of the fighter cover (either P, F, or G) on the Mission Chart when entering Zones 2, 3, and 4.

c. Resolve combat initiated by enemy fighters in each zone entered (both to and from the target) according to the Combat Procedure, section 6.0.

d. When the B-17 enters the Designated Target Zone:

—Roll for weather over the target on Table O-1, and then resolve combat according to the Combat Procedure, taking into account any weather effects.

—Resolve anti-aircraft fire by consulting Tables O-2 through O-5.

—Resolve the Bomb Run by consulting Tables O-6 and O-7.

e. After the Bomb Run is resolved:

—Begin the return flight to England by turning the B-17 counter around and facing it towards the 8th Air Force Base.

—Resolve combat again in this zone, still taking into account any weather effects (roll again on Table B-2).

f. Each subsequent turn of the return flight to base, place the B-17 counter one zone closer to the 8th Air Force Base, and resolve combat according to the Combat Procedure.

g. When the B-17 re-enters Zone 1:

—Roll for weather at the base on Table O-1.

—Place the B-17 counter on the 8th Air Force Base, and roll for landing on Table G-9 taking into account all weather effects and damage modifiers.

—After landing, roll separately for each seriously wounded crew member according to Note b of Table Bl-4 to determine survival. Also roll for frostbite effects under the rules section Heat Out/Frostbite, if applicable.

h. Record mission results on Composite Mission Record.

6.0 COMBAT PROCEDURE

6.1 DETERMINE ATTACKERS

a. Roll for the number of waves of intercepting German fighters on Table B-1 (roll on Table B-2 if the B-17 counter is in the target's zone).

b. For each separate wave of attackers roll once on Table B-3 to determine the specific fighters encountered and the clock position of their attack. Record the 2D number of each wave (from Table B-3) on the Mission Record for reference. (When this wave's attack has been resolved, cross out the number.) Place the fighters on the game mapboard in the proper clock position of their attack.

6.2 FIGHTER COVER DEFENSE

If the B-17 counter is within Zones 2, 3, or 4, roll on Table M-4 to determine how many of this wave's fighters are driven off by friendly fighter cover. Immediately remove that many fighters of your choice from the map. If the B-17 is outside of friendly fighter cover (in Zones 5-8) ignore this step.

6.3 B-17 DEFENSIVE FIRE

a. Each available manned MG (machine gun) position may fire at any one fighter within its field of fire as shown on Table M-1. Designate the targets of each MG position with the appropriate counter. Mark off one burst of ammunition for each MG position firing.

b. Roll once on Table M-1 for each firing MG position to determine if the target fighter is hit.

c. For each hit a fighter receives, roll once on Table M-2 to determine the damage to the fighter from that hit. Remove destroyed fighters, and place FCA and/or FBOA counters on damaged fighters.

6.4 GERMAN OFFENSIVE FIRE

a. Roll once on Table M-3 for each surviving fighter to determine if that fighter hits the B-17, taking into account any modifiers due to damage. Any fighter which does not hit the B-17 is removed from play (exception: see section 13.1).

b. When a fighter hits the B-17, roll once on Table B-4 to determine the number of shells which hit the bomber from that fighter.

c. For each shell hit, roll once on Table B-5 under the appropriate clock position of the attacking fighter to determine the section of the B-17 this shell hit. Record all sections hit on the Mission Chart.

d. Roll once on the specific damage tables (P-1 through P-6, Bl-1, and Bl-2) for each hit to determine and resolve damage done. Record all damage and effects of damage on the Mission Chart.

6.5 SUCCESSIVE ATTACKS

a. Any fighter which scores a hit in its initial attack on the B-17 (even if the hit has no effect) attacks the B-17 again. Roll once on Table B-6 for each fighter making a successive attack to determine its new attack position. After all fighters conducting successive attacks are positioned, remove the number of fighters allowed due to successful fighter cover according to the roll on Table M-4 during the initial attack. Then resolve defensive fire and the fighter attacks normally. Fighters not scoring a hit during this attack are removed from play (exception: see section 13.1).

b. Fighters which score a hit during their first successive attack conduct a second successive attack as above. After its second successive attack, a fighter is removed from play, even if it scored hits every time. The most attacks any one fighter can make against the B-17 during one wave is three—one initial and two successive attacks.

6.6 2ND AND 3RD WAVES

Resolve any additional wave attacks according to the Combat Procedure described for the 1st Wave above. (Roll again for fighter cover defense on Table M-4 for each additional wave while in Zones 2, 3, and 4.) After all attacks have been resolved completely, continue the mission according to the Mission Steps above.

7.0 HOW TO WIN

A B-17's bombing results and survival determine whether a mission is an 8th Air Force Victory, a German Air Defense Victory, or a draw. The cumulative results over 25 missions determine victory in the Campaign Game. In addition, the survival of an individual bomber or crew member over several missions can be measured as a relative performance rating.

7.1 MISSION VICTORY CONDITIONS

A mission is considered an 8th Air Force Victory if the B-17's Bomb Run was On Target, and the B-17 returned to England not irreparably damaged.

A mission is considered a German Air Defense Victory if either the B-17 was destroyed in combat, crashed outside of England, or was irreparably damaged in combat or while landing.

A Mission is considered a Draw if the B-17 was unable to bomb the target or if the bomb drop was Off Target, but returned to England and was not irreparably damaged either in combat or while landing.

7.2 CAMPAIGN GAME VICTORY CONDITIONS

At the end of the 25 mission campaign, total the number of 8th Air Force Victories and German Air Defense Victories, and ignore the number of draws. The side with the most victories is the winner of the Campaign Game.

7.3 PERFORMANCE RATINGS

B-17 AND CREW MEMBER SURVIVAL RATING
Per plane or per crew member.

# OF MISSIONS SURVIVED	RATING
1-5	Poor
6-10	Fair
11-17	Good
18-24	Excellent
25	Superb

Notes: a) A B-17 which survives 25 missions may be retired and sent back to the USA for publicity and morale boosting, or it may continue to fly.
b) A B-17 may survive 25 or more missions while going through several sets of crews along the way.
c) Any crew member who survives 25 missions is sent home to the USA.
d) A B-17 may be destroyed, but surviving crew members continue on another plane.

BOMB RUN RESULT RATING
Per plane or group of planes (for multi-plane missions).

BOMB RUN PERCENTAGE	RATING
5%	Poor
5-14%	Fair
15-29%	Good
30% +	Excellent

Note: The Bomb Run performance ratings can be used to rate the bomb drop of a single mission, the average of several planes on the same mission, or the average of a single plane over a complete campaign.

8.0 ABORTING THE MISSION

"Aborting a mission" means that the B-17 turns around and heads for home without bombing the target. Historically, the decision to abort or continue was the captain's, and his word was final. For purposes of this game, players may choose to abort after resolving all combat in any zone. However, the aborted mission counts toward the required 25 missions only if any of the following circumstances arise due to German fighter attacks:

a. Bomb Bay doors, intercom, or Norden bombsight inoperable.

b. Compartment heat or suit heater inoperable for one or more crewmen.

c. Bombardier is seriously wounded or KIA.

d. If the Navigator is seriously wounded or KIA and the B-17 is out of formation, the B-17 must abort.

e. If both the Pilot and Co-pilot are seriously wounded or KIA and the B-17 is out of formation, the B-17 must abort.

f. Out of formation.

g. Oxygen out for one or more crewmen.

h. One or more engines out. (If two or more engines are out, B-17 must abort.) Except where required above to abort, players having the option to abort may choose instead to continue the mission.

9.0 DEFENSIVE FIRE

Begin the Defensive Fire Phase by checking which machine gun positions are manned and finding the counters for those guns. Then examine Table M-1 and the position of the enemy fighters to determine which guns have target fighters in their field of fire. Allocate the fire of the B-17's guns by marking the target fighter with the appropriate counter. For example, if both the Nose Gun and the Top Turret are firing at a fighter at 12 O'Clock High, the counters for the Nose Gun and Top Turret are placed on that fighter's card. After the gun counters are all placed, mark off one burst of ammunition (one box) for each firing gun on the Mission Chart. Then roll on Table M-1 for each gun to determine if the target fighter is hit. When a fighter is hit by defensive fire, roll on Table M-2 to determine the extent of the damage done. The guns in the Nose section and the Tail Guns have special characteristics. Players may optionally employ Area Spray Fire.

9.1 NOSE SECTION GUNS
Due to the limited compartment space, only two crewmen may be in the Nose section of the B-17. There are three guns in this section, the Nose, the Starboard Cheek, and the Port Cheek. A maximum of two of these three guns may be fired at the same time, including the Nose and either of the cheek guns. The two cheek guns may not be fired simultaneously.

9.2 TAIL GUNS
German fighters quickly learned that it was very dangerous to approach a B-17 from the rear, as this put them within range of the twin guns for a relatively long period of time. When attacks from the rear dropped off, tail gunners developed a new technique: shooting at fighters attacking from the front as they passed the rear of the B-17.

Accordingly, the Tail Guns may be allocated to any fighter attacking from the 10:30, 12, or 1:30 positions, whether High, Level, or Low. However, this defensive fire is not resolved until after all other defensive fire and all German offensive fire is resolved. Thus the target fighter could be shot down, or the Tail Guns themselves be knocked out, before the Tail Guns get a chance to fire. No ammunition is marked off unless the Tail Guns actually shoot. Tail Guns firing in this manner must roll a "6" to hit, regardless of the position of the fighter. Tail Guns may not fire in this manner if the intercom is out.

9.3 ACE GUNNERS
Once a gunner has shot down 5 or more fighters in his career, he is an Ace Gunner and may add 1 to his defensive fire rolls. Ace Gunners lose this bonus when frostbitten and when wounded. The bonus is retained if the intercom is knocked out. A gunner becomes an Ace at the instant of his 5th kill, and the bonus takes effect with his next defensive fire.

9.4 MACHINE GUN AMMUNITION
The ammunition available for each machine gun position per mission is shown on the Mission Chart. Each box next to the gun position's name represents one burst of ammunition. Mark off one box when a gun position is allocated to fire. When a gun position runs out of ammunition (all boxes are marked off), it may borrow additional ammunition from another position. Ammunition is transferred in increments of 2 bursts (2, 4, 6, etc., bursts at a time). Mark off the boxes from the gun passing the ammunition, and erase marked off boxes for the gun receiving the ammunition. Twin gun mounts (Ball, Top, and Tail positions) may only obtain ammunition from another twin mount. Ammunition may only be exchanged during a turn when no fighter waves are rolled on Tables B-1 or B-2, or after all attacking fighters have been driven off either by friendly fighter cover or other B-17s.

9.5 AREA SPRAY FIRE (Optional Rule)
Area Spray Fire represents the "hosing" of an area with a long burst of an unaimed spray of bullets. Although usually ineffective as far as hits were concerned, it could drive away a fighter due to the bewildering effect of numerous tracer bullets peppering the sky the fighter was flying into. The technique of spray fire was not favored by experienced gunners because 1) it quickly burned up ammunition, 2) was generally ineffective against good pilots, and 3) could jam the gun.

Area Spray Fire is an optional rule which players may include for additional interest. Place a Spray Fire marker on top of any gun marker that will spray during the Defensive Fire Phase.

Mark off three bursts of ammunition for each gun position that sprays. When the spraying gun fires, resolve its fire on Table M-5 instead of Table M-1. Area Spray Fire may not be used against any 10:30, 12, 1:30, or Vertical Dive attacks. It may be used against any 3, 6, 9, or Vertical Climb attacks. Ace Gunners employing Area Spray Fire do not add 1 to their die roll.

10.0 ENGINES OUT

One of the strengths of the B-17 design was its four engines. Crews found that the plane could continue to fly, even with only one engine still functioning. However, the loss of each succeeding engine, meant new problems and more danger.

10.1 ONE ENGINE OUT

With one engine out, the B-17 can only stay in formation if it jettisons its bombs immediately. If the B-17 is already in the Target Zone when the engine is knocked out, it may bomb the target and still remain in formation. Otherwise, if the B-17 decides to keep its bombs aboard and continues to the target with one engine out, it is Out of Formation and must spend 2 turns in each zone (while it still has its bombs) due to slowness caused by the weight of the bombs. The B-17 must therefore roll for waves of German fighters twice per zone on either Table B-1 or B-2. Once the B-17 has dropped its bombs, it may continue its mission at the normal rate of speed of 1 zone per turn.

10.2 TWO OR THREE ENGINES OUT

The B-17 must jettison its bombs, drop from formation, and spend 2 turns in each zone due to slowing down. Roll for waves of German fighters twice per zone on either Table B-1 or B-2. The B-17 must also drop to 10,000 feet and is subject to Light Flak if over land (see section 13.0 Out of Formation). When a B-17 has two or more engines out, attacking fighters add 1 to their German Offensive Fire die rolls on Table M-3, and the B-17 may not take Evasive Action (see section 15.0).

10.3 ONE ENGINE OPERATING

The B-17 may go one zone further, then it must either crash land, or the crew must bail out on Table G-6. However, the crew may throw overboard all bombs, guns, ammo, and fire extinguishers, and fly 2 zones past the zone in which the third engine was lost. When landing with only one engine, subtract 3 from the landing roll on Tables G-9 and G-10. (See 10.2 above for additional effects.)

10.4 NO ENGINES OPERATING

The B-17 must either crash land in its present zone on either Table G-9 or G-10 (find this zone in the Flight Log Gazetteer to determine if the B-17 is over land or water, or if you have a choice), or the crew must bail out on Table G-6 (and Table G-8 if over water). Once the last engine is out, the player must immediately choose either to attempt the crash landing or bail out. If crash landing with all engines out, landing roll is –7 on Table G-9 and –4 on Table G-10. (See 10.2 above for additional effects.)

11.0 HEAT OUT/FROSTBITE

The B-17 normally operated above 20,000 feet where the temperatures were substantially below freezing. Some crewmen operated in heated compartments, and others wore electrically heated suits which they plugged into the B-17's circuitry. When battle damage or equipment malfunction cut off someone's heat, the plane had to drop out of formation and descend to an altitude with a more moderate temperature before frostbite could occur.

When any crewmen's suit heat or any compartment heat is out, the B-17 may travel one more zone at the current altitude and in formation. Thereafter, the B-17 must either descend to 10,000 feet for warmth (no frostbite, but the B-17 is out of formation), or stay in formation at current altitude and roll for frostbite once per zone for each affected crewman. Roll 1D: 1-3 = Frostbite for that crewman; 4-6 = No frostbite. Once a crew member is frostbitten, he remains so for the rest of the mission,

and he can hit attacking fighters only by rolling a 6, regardless of the position of their attack.

After landing, roll for each frostbitten crew member separately to determine the effects of frostbite. Roll 1D: 1,2 = Serious injury/amputation, may not fly again; 3-6 = Recovers, may fly next mission. Also, any frostbitten crew member who is also seriously wounded adds 1 to his serious wound survival die roll (see Note b. under Table Bl-4).

12.0 OXYGEN OUT

Because the atmosphere at 20,000+ feet is so thin, B-17 crews had to be constantly supplied with oxygen. Each compartment had outlets from the central oxygen supply to which a crewmen's mask was attached. Portable emergency oxygen bottles were available for short movements around the plane. If a crewman's oxygen supply was interrupted for any reason, he would quickly lose consciousness. The oxygen supply lines were also a potential fire hazard.

12.1 OXYGEN OUT EFFECTS

Two shell hits to a particular compartment's or crew member's oxygen system (cumulative over the course of a mission) will knock out the oxygen for that compartment or crewman. The first shell hit has no effect. Keep a record on the Mission Chart of all oxygen system hits. When an area's or crew member's oxygen is knocked out, the B-17 must drop out of formation down to 10,000 feet (see section 13.0 Out of Formation). However, if a "vacancy" exists somewhere else in the plane due to the death of another crewmen, the crew member with no oxygen can occupy that position and the B-17 can stay in formation. If a B-17 has been forced down to 10,000 feet by oxygen being knocked out, and later, due to the death of a crew member or members, there is enough vacant functioning oxygen supply to accommodate all surviving crew members, then the B-17 may re-ascend to 20,000 feet to avoid rolling for Light Flak (but may not rejoin the formation).

12.2 OXYGEN FIRES

Oxygen fires can result from shell hit damage in the various occupied sections of the B-17. When an oxygen fire occurs, place one of the Oxygen Fire markers on the appropriate section of the B-17 on the mapboard. There are 5 portable fire extinguishers in the B-17, each represented by a counter placed on the Crew Placement Board at the start of play. Each may be sprayed once, and then its empty. When an oxygen fire breaks out, one crew member in that compartment (or an adjacent one if the fire breaks out in an empty compartment) must immediately be designated to fight the fire. A crewman may not operate a gun for the remainder of a wave's attack in which he is fighting a fire. The designated crewman may immediately attempt 3 times to put out a fire (i.e., use up 3 extinguishers) by rolling up to three times on Table Bl-3. If the fire is not out after the third try, the crew must immediately bail out on Table G-6. Used extinguishers are removed from play.

13.0 OUT OF FORMATION

When a B-17 was forced to drop out of its tight, supportive box formation, its chances of returning to base safely were greatly diminished. Out of formation planes were easier prey for fighters, and had to rely on their own navigation. Out of formation effects begin after the resolution of the fighter wave attack which resulted in the B-17 falling out of formation.

13.1 OUT OF FORMATION EFFECTS

a. Add 1 Me 109 at 12 Level per wave of attacking fighters. If no waves appear, then this Me 109 does not appear either.

b. Any modifications to the roll on Tables B-1 or B-2 due to the B-17's squadron position are changed to 0. Also, ignore the additional fighter that normally appears when a B-17 is the lead or tail bomber. (See 13.1a. above.)

c. Any fighter attacking an out of formation B-17 automatically makes a total of 3 attacks (one initial and two successive) against

the B-17. The fighter continues to attack 3 times, even if it fails to hit, unless it is first destroyed or takes a "FBOA" result.

d. If out of formation and at a low altitude (10,000 feet) due to oxygen or heat out, or because it is flying with only 1 or 2 engines working, then the B-17 is within range of light anti-aircraft fire from the ground. Over every zone that is at least partially land (land other than England—see the Flight Log Gazetteer, Chart G-11), roll 2D twice on the Light Flak column of Table O-3 to determine if the B-17 is hit by flak. Resolve any flak hits by consulting Tables O-2 through O-5.

13.2 OUT OF FORMATION OPTIONS

a. A B-17 out of formation within fighter cover range uses fighter cover as per the normal mission procedure.

b. Any B-17 which is out of formation prior to the Bomb Run may immediately abort the mission, turn around, and head for home (see section 8.0 Aborting the Mission). An out of formation B-17 may choose to complete its mission and bomb the target, but this is not recommended.

c. If the target has not been bombed when a B-17 is forced out of formation, the bombs may be jettisoned to negate the possibilitiy of them exploding if the Bomb Bay is hit. The bombs may be jettisoned at any time. Make a note of the loss on the Mission Chart.

14.0 REPLACING WOUNDED CREWMEN

Each member of the crew of the B-17 is represented on the Crew Placement Board by his individual counter. Whenever a crew member is wounded or KIA, mark his counter with a wound marker showing the degree of his injury. When a crew member is seriously wounded or KIA, he can no longer fire any guns or perform any other functions. However, another crew member may take over his position. Simply take the counter of the crew member taking over and place it in the position vacated by the wounded man. Remove KIA men from the Crew Placement Board. (They are assumed to placed in an out of the way section of the plane.) Wounded men must be placed where they have a source of heat and oxygen.

14.1 CREW MOVEMENT

During turns when no waves of attacking fighters appear, or after all fighters are driven off by either friendly fighter cover or other B-17s (by rolling a "No Attackers" result on Table B-3), crew movements are made with no penalty. These safe turns are the only time crew movements may be made if the intercom system is out. If crew movements are made in a zone where the B-17 is attacked, certain penalties accrue. The moving crew members may not fire any guns from either their old or new position, until the attacks (both initial and successive) of one wave of fighters have been resolved. Crew movements can be made within the same compartment with no penalty. For example, the Waist Gunners can switch guns during an attack. There is no penalty for moving a wounded man.

14.2 CREW REPLACEMENT EFFECTS

a. A crew member now occupying another wounded man's position on the Crew Placement Board assumes any damage taken by the position. For example, if the Navigator moves up to the Bombardier's position to replace a seriously wounded Bombardier and fire the Nose Gun, any damage from shell hits that would normally affect or wound the Bombardier now affect the Navigator.

b. Gunners moving to a new gun position can only hit fighters by rolling a 6, and lose any ace bonus. (Exception: the Ball and Top gunners may replace each other, and the Waist gunners may replace each other, with no loss of effectiveness.)

c. Any crew member may fly the B-17 if the Pilot and Copilot are both seriously wounded or KIA, but the first one to take over flying must be the Engineer (someone else may take over the Top Turret if tactically desirable). If the Engineer is subsequently or already seriously wounded or KIA, then anyone else may take over, with approriate modifiers to the landing (see

section 16.0 Landings).

d. Only during an emergency can a single man fly a B-17 for an extended length of time. Therefore,the Pilot and Copilot may not leave their positions to fire guns. If both are still functioning with no worse than a light wound, the Copilot may temporarily vacate his post to fight an oxygen fire. Otherwise, the Pilot and Copilot must stay in their normal positions.

15.0 EVASIVE ACTION

Evasive action is the random dips, dives, banks, and weaves that a pilot could put his plane through attempting to dodge enemy fighter attacks. Flying like this necessarily threw off the aim of the plane's gunners, and wasn't possible if the B-17 was heavily damaged. Due to the proximity of friendly planes and the danger of collision, B-17's in formation may not use evasive action.

15.1 EVASIVE ACTION EFFECTS

Evasive action is only allowed for B-17's flying out of formation, and has the following effect:

a. All fighters attacking a B-17 which is performing evasive action subtract 1 from their attacking die rolls on Table M-3 (a roll of 6 is still a hit, regardless of modifications).

b. All guns firing from a B-17 taking evasive action must roll a 6 to hit any attacking fighter, no matter what area of attack it is coming from. Any Ace Gunner bonus is still in effect.

15.2 EVASIVE ACTION RESTRICTIONS

No evasive action is allowed if:

a. The B-17 is still in formation.

b. Two or more engines are out.

c. Control cables are out.

d. The B-17 has accumulated 3 or more negative landing modifiers.

e. Anyone other than the Pilot or Copilot is flying the plane.

f. Any damage previously received specifically disallows taking evasive action.

16.0 LANDINGS

The adage "What goes up, must come down" certainly holds true for the 40,000 pound B-17 and its crew of 10 men. Where and how it comes down will determine whether this particular plane and crew gets to fly another mission or not. In this game, as in reality, an occasional B-17 will unfortunately return to earth as chunks of burning and smoking metal. It is more likely, however, to be landed in one piece under the control of its crew.

There are three types of landings which can occur at the end of a mission. The first is a landing in England, the second is a landing in occupied Europe, and the third is a crash landing (or ditching) into the sea. Landings are accomplished by rolling 2D on either Table G-9 or G-10. Damage received in combat plus circumstances described in the notes to these tables may affect the success of the landing by increasing or decreasing the landing dice roll. An unsuccessful landing can mean destruction of the B-17 and death or injury for the crew. Crews of planes downed in the sea face the additional hazards of drowning and exposure.

16.1 LANDING LOCATIONS

The location of the B-17 counter on the Strategic Movement Board determines where the plane will land. Refer to the Flight Log Gazetteer, Chart G-11, and cross-reference the zone the B-17 now occupies with the Mission Target. The letter notation to the right of the slash mark will detail whether the B-17 is over water, land, or over some of both. For example, a B-17 which must land in Zone 3 during a mission to Bremen must land in the water (W). A B-17 which must land in Zone 4 during a mission to Rotterdam has the choice of coming down in the water or in the Netherlands (W-N).

16.2 LANDING IN ENGLAND

A B-17 which reaches Zone 1 is landing in England and is automatically assumed to be landing at an air base. Emergency air strips had been prepared along the coast, and RAF bases were prepared for emergency landings by all types of allied aircraft. Roll for landings in England on Table G-9.

16.3 LANDING IN EUROPE

A B-17 landing in Europe is automatically assumed to be crash landing in some open area, not an airfield. Roll for landings in Europe on Table G-9, subtracting 3 from the roll as per Note j of the table. B-17's which land in Europe are considered lost.

16.4 LANDING IN THE SEA

Landing a B-17 in the sea is an act of desperation, and should only occur if the plane is forced out of the sky in a zone totally over water. Ditching in the sea is preferable only to bailing out into the sea. Roll for landings in water on Table G-10. A B-17 landing in the sea is lost. Crewmen rescued from the sea in Zones 2-5 are returned to England; those rescued from the sea in Zones 6 or 7 are captured.

17.0 POST MISSION DEBRIEFING

The return of the B-17 to earth, regardless of its condition or location, is not quite the end of the mission. Before beginning the next mission, players must resolve the fate of any returning seriously wounded and frostbitten crew members (see Table Bl-4 and section 10.0 Heat Out/Frostbite), then log in the results of the just completed mission on the Composite Mission Record. Note the percentage of bombs dropped on the target in the appropriate column. Destroyed B-17s and crew members who will not be flying again, for one reason or another, are "x'd" out. Notes can be added to lost crewmen to describe their fate, such as: KIA (killed in action; DOW (died of wounds); LAS (lost at sea); IH (invalided home); and BO-C (bailed out-captured). Also note enemy fighters destroyed during the mission in order to keep a running tally of a gunner's progress towards ace status. When a bomber or crew member is lost, pencil in a new name in preparation for the next mission. A sample completed Composite Mission Record is included at the end of the Sample Mission in Part II of this rules booklet.

18.0 RANDOM EVENTS (Optional Rule)

Random Events have been included as an option for those experienced players wishing to add more detail to their missions. Random Events come into play when a "66" is rolled on Table B-3. Players not wishing to complicate play should treat a roll of "66" as a "No Attackers (c)" result instead. To incorporate Random Events, roll on the following table whenever a "66" is rolled on Table B-3, and implement the result.

G-11 RANDOM EVENTS TABLE
Roll 2D.

ROLL EVENT

2   Engine failure. (a)
3   Formation casualties. Roll 1D: 1-3 = You are now the lead bomber; 4-6 = Now tail bomber. (b,h)
4   Loose formation. Roll to determine enemy fighter waves in zone on Table B-1 or B-2 is +1. (b,i)
5   Aggressive "Little Friends". Roll for fighter cover defense on Table M4 is +1 for the remainder of the mission. (b)
6   Tight formation. Roll to determine enemy fighter waves in zone on Table B-1 or B-2 is -1. (b,j)
7   Rabbit's foot. You may re-roll any one die or dice roll. (c)
8   Tight formation. See result #6 above.
9   Bad Luftwaffe communications. (d)
10   Extreme cold. Roll 1D for each gun positon: 1-5 = No effect; 6 = Gun jammed. (e)
11   Ace for a day. Roll 1D: 1,2 = Engineer; 3,4 = Ball Gunner; 5,6 = Tail Gunner. This gunner +1 to hit on Table M-1 for remainder of the mission. (f)
12   Mid-air accident. (g)

Notes: a) Roll 2D: 2,3,7 = #1 engine out; 4, 10-12 = #2 engine out; 5,6 = #3 engine out; 8,9 = #4 engine out. If this random event is rolled again, the previously failed engine restarts.

b) If this random event is rolled again, ignore and re-roll on the table until another event is rolled.

c) Any roll which you don't like which occurs after you obtain the rabbit's foot may be re-rolled. More than one rabbit's foot may be accumulated during a mission, and they may be carried over to the next mission. Once used, a rabbit's foot is gone.

d) Remove one fighter of your choice from each wave for the remainder of the mission. A second roll of this event cancels its effects, a third restores them, and so on.

e) See the notes to Table M-5 for repairing jammed guns. If you are out of formation at 10,000 feet, ignore this result and re-roll until another is obtained.

f) It is possible to have more than one "Ace for a day", but if one crewman is rolled twice, ignore the second roll and don't roll again. A legitimate ace is unaffected by this event, and don't roll for another crewman.

g) Roll 2D: 2-8 = Close call but no effect; 9,10 = Shallow dive (B-17 falls out of formation for 1 zone and then regains formation); 11 = Steep dive (B-17 falls violently out of formation, bombs tear through the bottom of plane and are lost if still aboard, and roll 1D once for each wing: 1-5 = Wing holds—6 = Wing rips off, crew must bailout on Table G-7. B-17 must abort mission; 12 = Mid-air collision (B-17 destroyed and crew must bailout on Table G-7). If you are out of formation, treat this result as #2, Engine failure, instead.

h) If you are already the lead or tail plane, ignore this result and re-roll until another result is obtained. If you are out of formation, re-roll also.

i) If you are out of formation, add +1 to rolls on Tables B-1 and B-2 for the remainder of the mission.

j) If you are out of formation, add –1 to rolls on Tables B-1 and B-2 for the remainder of the mission.

19.0 FLAK BURSTS INSIDE PLANE (BIP)

19.1 COMMENTARY

The word *flak* comes from the German word *fliegerabwehrkanonen*, meaning *flieger* flyer + *abwehr* defense + *kanonen* cannons, or antiaircraft guns. Most potential bombing targets of any value were protected by batteries of flak guns. When bombers were nearing the target, they had to fly straight and level for several minutes to maximize their accuracy. During these minutes, the bombers were most vulnerable to aimed fire and barrages from the flak guns below. Most flak damage consisted of near misses which could do some internal damage or throw the B-17's aim off. Occasionally, a shell would actually explode inside the plane with generally catastrophic consequences.

19.2 BIP EFFECTS

When a BIP result is rolled on Table O-4, Effect of Flak Hits, it has the following effects:

a. All crewmen in this compartment are KIA.

b. If the area hit is a Wing, the Tail, or the Pilot Compartment, the B-17 dives out of control to the ground and the remaining crewmen immediately bailout according to Table G-7.

c. If the Bomb Bay is hit with the bombs still aboard, the B-17 and crew are destroyed.

d. If the area hit is the Nose, empty Bomb Bay, Radio Room, or Waist, the following occurs:

—The B-17 immediately falls out of formation (see rules section 13.0).

—The B-17 must spend two turns in each following zone, rolling twice for German fighter waves. (If the zone currently occupied is the target zone and flak over the target inflicted the BIP, the B-17 must spend two turns in the target zone after turning around.)

—The B-17 is assumed to have received every damage result possible on the damage table for that compartment. (Examine the correct damage table and assume each number from 2 to 12 has been rolled.) Record this damage on the MC.

—The landing roll on either Tables G-9 or G-10 is -4.

—No evasive action is possible for this plane.

—If the B-17 returns safely to England, it is considered to be irreparably damaged and may not fly further missions.

20.0 GERMAN FIGHTER PILOT STATUS
(Optional Rule)

At the expense of extended playing time, players may include this provision for Ace and Green German fighter pilots. During the Combat Procedure after the B-17 has allocated its defensive fire and noted any gun positions which are employing spray fire, roll on Table M-6 for each German fighter on the mapboard to determine if the pilot is an Ace or Green Pilot. Mark Ace or Green Pilots with an appropriate marker. The +1 or -1 modifications to B-17 defensive fire rolls against Green and Ace Pilots, respectively, apply to both Tables M-1, B-17 Defensive Fire, and M-5, B-17 Area Spray Fire.

21.0 TWO PLAYER RULES

These guidelines are included for those players who wish to actively participate as the German air defenses. The German player rolls the dice for all attacking German fighters (Tables B-1, B-2, B-4, B-5, M-3, and M-6) and for Flak (Tables O-2, 3, 4, and 5). However, the B-17 player rolls the dice for damage done by hits to the bomber, and reveals to the German player only such damage as would be readily visible from outside of the plane (for example, leaking fuel tanks, dead engines, etc.). Any wounded crewmen or non-obvious internal damage is not revealed to the German player, as this knowledge would result in an advantage which German fighters would not, in reality, have. The Crew Placement Chart and Mission Chart should be kept out of the German player's sight. During combat, the German player may choose the area of attack for each re-attacking fighter (but may not choose Vertical Dive or Vertical Climb), but only one fighter may be placed at each elevation per clock position. For example, during the fighter's first successive attack, the German player may only place one fighter at 12 O'Clock High. If the German player instead elects to roll for successive attack fighter placement, it is possible to have more than one fighter appear in the same location.

21.1 REVEAL TO THE GERMAN PLAYER

Aileron, elevator, rudder, or wing flap inoperable
BIP flak hits
B-17 drops out of formation
B-17 drops to 10,000 feet
Flak shell hits
Fuel tank fire, or fuel tank leakage
Oil tank fire, or oil tank leakage
Oxygen fire
Second and all succeeding window hits
Wing flap inoperable
Wing root or tailplane root hits

21.2 KEEP SECRET

Ace status of gunners
Armament inoperable and MG ammunition remaining
Autopilot mechanism inoperable
Bomb hits that don't explode the bombs
Bomb Bay door hits
Bomb controls or release mechanism inoperable
Brakes, tailwheel, or landing gear inoperable
Compartment heat or electric suit heat out
Control cables inoperable, or hits on them
Crew movement on the Crew Placement Board
First window hit
Frostbite, wounds, or KIA
Pilot Compartment instruments or intercom system out
Navigator's equipment or Norden bombsight inoperable
Number of missions flown by any crew member
Oxygen inoperable, or oxygen hits
Rubber rafts hit

PART II B-17 QUEEN OF THE SKIES SAMPLE MISSION

NOTE: The following sample mission has been conducted without the use of any of the optional rules. Numbers bracketed by quotation marks ("2") represent either a dice roll result or a net dice roll result after the number rolled has been modified by game circumstances. The complete Mission Chart of the sample mission is included at the end of the sample mission text. Also included is a complete campaign game Composite Mission Record provided as an example. The marks and notations shown on these samples are intended primarily as examples. Any code or notation that you invent to embody the required information is acceptable.

1.0 PRE-MISSION STEPS

1.1 For this sample mission, a new bomber and crew will be selected. The bomber's name is "Miss Cue", and this is noted on both the Mission Chart (MC) and the Composite Mission Record. Names are given to all the crew members and noted on the Composite Mission Record.

1.2 This sample mission is assumed to be Mission #11 of a 25 mission campaign. Therefore, a 2D roll is made on Table G-3 to determine the target city. The colored die shows a "2", and the white die shows a "5". The result of the roll is thus "25", and the target is an industrial complex outside of Paris, France. The target city and type are noted on both the MC and the Composite Mission Record.

BOMBER NAME: MISS CUE

MISSION # 11 (THIS BOMBER 1)

TARGET CITY: PARIS **TARGET TYPE:** IND.

1.3 Miss Cue's position and squadron formation are now determined. A 2D roll is made, and in this case the two numbers are totaled. The number rolled is a "7", and the result for that number from the Formation Position half of Table G-4 is "Middle". This places the B-17 somewhere in the middle of its squadron. (A roll of "2" would have made Miss Cue the lead bomber, and a roll of "12" would have made her the tail bomber. These are more vulnerable and dangerous positions, each attracting an additional fighter per wave as shown on the MC.) The box marked "Middle" under B-17 Position in Formation on the MC is checked. Next roll 1D on the second part of Table G-4, Squadron Position. The roll is "4", placing Miss Cue in the Middle Squadron, which is the safest part of the formation. Check the box marked "Middle" under Squadron Position on the MC.

B-17 POSITION IN FORMATION:

☐ LEAD (+1 Me 109/12 High)

☑ MIDDLE

☐ TAIL (+1 Me 109/6 High)

SQUADRON POSITION:

☐ HIGH

☑ MIDDLE (-1)

☐ LOW (+1)

1.4 Examine the Flight Log Gazetteer, Chart G-11, to check the effect of the mission's course on expected German resistance.

On the gazetteer's row marked Paris, are the following notations: –2/W under Zone 2, and 0/F under Zones 3, 4, and 5. This information reveals that in Zone 2 Miss Cue will be over water (the English Channel), and in Zones 3, 4, and 5 she will be over France. Additionally, rolls on Tables B-1 and B-2 for enemy fighter waves will –2 in Zone 2 and unchanged in Zones 3, 4, and 5. These modifications, plus the –1 benefit Miss Cue receives from being in the Middle Squadron (as shown on the MC), are noted in the Fighter Waves section of the MC. The net modification to rolls on Tables B-1 and B-2 will be –3 in Zone 2, –1 in Zone 3, –1 on Zone 4, and –1 in Zone 5.

FIGHTER WAVES

ZONE	2 −3	3 −1	4 −1	5 −1
OUT		32		
BACK				

1.5 The B-17 counter representing Miss Cue is placed on the 8th Air Force Base on the Strategic Movement Board pointed toward Paris.

2.0 TURN 1

On Turn 1 the B-17 counter is moved into Zone 1. No German fighter interception is possible in this zone, so no roll is made for friendly fighter cover. Miss Cue passes through Zone 1 untroubled.

3.0 TURN 2

3.1 On Turn 2 the B-17 counter is moved into Zone 2, toward Paris.

3.2 Roll 1D on Table G-5 to determine the extent of friendly fighter cover. The roll is a "4", resulting in "Fair" fighter cover. Note the fighter cover in the Fighter Cover section of the MC by putting an "F" in the Zone 2 box under "Out".

FIGHTER COVER:

	OUT	BACK
ZONE 2	F	
ZONE 3	G	
ZONE 4	P	

3.3 Roll 1D on Table B-1 to determine if Miss Cue is attacked by German fighter waves in this zone. Table B-1 is consulted because this is not the Designated Target Zone. (The Designated Target Zone is Zone 5 because it contains Paris, the target city.) The roll is a "3", which is modified by –3, for a net roll of "0". (The roll is modified by –2 for the zone according to the Flight Log Gazetteer, and –1 for being in the Middle Squadron.) A net roll of "0" or less on Table B-1 is treated as a "1" and results in no enemy waves appearing.

3.4 Since no enemy fighters appear, Miss Cue passes through this zone again untroubled.

4.0 TURN 3

4.1 The B-17 counter is now moved into Zone 3.

4.2 Roll 1D on Table G-5 for fighter cover: "6" = Good fighter cover. A "G" is marked in the Fighter Cover section of the MC in the Zone 3 box under "Out".

4.3 Roll 1D on Table B-1 for German fighter waves: "4" – 1 = "3" = One enemy wave attacks.

4.4 Roll 2D on Table B-3 to determine the size of the attacking wave of German fighters. The colored die is a "3", and the

white die is a "2", for a result of "32". For a roll of "32", the table reads: "Two 190's: 10:30 High and 3 Level". Note the roll of "32" in the Fighter Waves section of the MC in the box marked "Out" under Zone 3.

4.5 Take two FW 190 fighter cards and place them on the mounted mapboard in the positions of their attack. The first is placed directly in front of the B-17, entirely on the mapboard (12 O'Clock High). The second is place off the B-17's starboard wing, half on and half off the mapboard (3 O'Clock Level).

4.6 Roll on Table M-4 to determine the effect of friendly fighter cover defense. The roll is a "3". Under "Good" cover (as determined in 4.2 above), a "3" reads: "2(1)". Fighter cover drives off two fighters from the attacking wave, of the player's choice. Since the wave consists of only two fighters, they are both removed from the map, ending the attack. Draw a line through the "32" in the Fighter Waves section of the MC to mark that that wave attack has been resolved.

4.7 Miss Cue has safely passed through Zone 3 and moves into Zone 4.

5.0 TURN 4

5.1 The B-17 counter is moved to Zone 4, still pointing to Paris.

5.2 Roll 1D on Table G-5 for fighter cover: "1" = "Poor" fighter cover. Mark a "P" in the Fighter Cover section of the MC for Zone 4 under "Out".

5.3 Roll 1D on Table B-1 for enemy fighter waves: "6" – 1 = 5 = One wave.

5.4 Roll 2D on Table B-3 to determine the size and position of the attacking wave: "5" and "6" = "56" = "No Attackers". Since Miss Cue is still in formation, the machine gun fire from surrounding B-17's has driven off any fighter's that would have otherwise attacked her.

5.5 Miss Cue has safely passed through Zone 4, and now moves into Zone 5.

6.0 TURN 5: FIGHTER ATTACKS

6.1 The B-17 counter is moved over Paris in Zone 5, pointing away from England.

6.2 Roll 2D on Table O-1 to determine the weather in the target zone: "8" = "Good" weather. Mark the weather with a "G" in the Weather Section of the MC. Good weather has no adverse effects on either enemy fighter waves or the Bomb Run.

WEATHER:

TARGET- _____ GOOD _____

6.3 Since Zone 5 is outside of friendly fighter cover, there is no roll on Table G-5.

6.4 Roll 1D on Table B-2 (Zone 5 is the designated target zone): "3" = one wave.

6.5 Roll 2D on Table B-3: "4" and "4" = "44" = "Two 190's: 12 O'Clock High and 12 O'Clock Low; 109: 1:30 Level; 110: 6 O'Clock Low". Note "44" in the fighter waves section of the MC for Zone 5, under "Out".

6.6 Place the fighter cards on the mapboard in the position of their attack:

—An FW 190 at 12 O'Clock entirely on the mapboard (High);

—An FW 190 at 12 O'Clock entirely off the mapboard (Low);

—An Me 109 at 1:30 half on the mapboard (Level);

—An Me 110 at 6 O'Clock entirely off the mapboard (Low).

6.7 Examine Table M-1, B-17 Defensive Fire, to find which machine gun positions can bear on the German fighters and what roll the guns must make to hit. Place counters for the

machine guns on the target fighters ▪ follows:

—The Starboard Cheek gun fires at the Me 109 at 1:30 Level, and must roll ▪ 6 to hit.

—The Tail Guns fire at the Me 110 at 6 O'Clock Low, and must roll a 3, 4, 5, or 6 to hit.

—The Top Turret and Nose Guns fire at the FW 190 at 12 O'Clock High, and both must roll a 6 to hit.

—The ▬▬ Turret fires at the FW 190 at 12 O'Clock Low, and must roll a 6 to hit.

One ammunition box is marked off on the MC for each of the firing machine guns. (Note that whether or not a gun fires, or which target it fires at if has several choices, is a player decision. For example, in 6.7 above, the Ball Turret could fire instead at the Me 110 at 6 O'Clock low.)

AMMO:

START	GUN	
15	NOSE	▨☐☐☐☐☐☐☐
10	PORT CHEEK	☐☐☐☐☐☐☐
10	STARBD. CHEEK	▨☐☐☐☐☐☐☐
16	TOP TURRET	▨☐☐☐☐☐☐☐
10	RADIO	☐☐☐☐☐☐☐
20	BALL TURRET	▨☐☐☐☐☐☐☐
20	PORT WAIST	☐☐☐☐☐☐☐
20	STARBD. WAIST	☐☐☐☐☐☐☐
23	TAIL	▨☐☐☐☐☐☐☐

6.8 Roll 1D on Table M-1 for each machine gun: Starboard Cheek—"6" = Hit; Tail Guns—"4" = Hit; Top Turret—"1" = Miss; Nose Gun—"1" = Miss; Ball Turret—"5" = Miss.

6.9 Roll 1D on Table M-2, Hit Damage Against German Fighter, for the hit on the Me 109 and the hit on the Me 110. Roll against the Me 109: "1" = "FCA" (Fighter is damaged, but continues attack with offensive fire roll –1). Roll against the Me 110: "4" + 1 (twin guns bonus) = "5" = Fighter destroyed and may not fire at the B-17. Remove the Me 110 card from the map, and note the kill on the MC next to the Tail Gunner.

6.10 Roll 1D on Table M-3, German Offensive Fire, for each surviving fighter: FW 190 12 O'Clock High—"5" = Hit; FW 190 12 O'Clock Low—"1" = Miss; Me 109 1:30 Level—"3" – 1 (this fighter took an FCA result during the B-17 defensive fire) = "2" = Miss. The FW 190 at 12 O'Clock Low and the Me 109 at 1:30 Level are removed from play because they missed.

6.11 Roll 2D on Table B-4, Shell Hits By Area, to determine how many shells have hit the B-17: "5" = 2 x 1.5 (FW 190 shell hits are x1.5 the number on the table due to their heavy armament, see Note [a], Table B-4) = 3 shell hits. Record "3 hits—12 O'Clock High" in the Hit Notes section of the MC.

HIT NOTES: 3H-12H: PC-TAIL

6.12 Roll 2D three times on Table B-5, Area Damage Tables, under Attack From 12 O'Clock (High) to determine which B-17 compartments have been hit: "4" = Superficial damage (No effect); "7" = Pilot Compartment; and "10" = Tail. Note Pilot Compartment and Tail in the Hit Notes section of the MC.

6.13 Roll 2D on Table P-2, Pilot Compartment, to determine shell hit damage: "5" = Copilot. Roll for Copilot wound on Table Bl-4, Wounds: "2" = Light Wound. Note "LW" for the Copilot on the MC, and put a Light Wound marker on the Copilot counter on the Crew Placement Board.

CREW NOTES:

BOMBARDIER _____

NAVIGATOR _____

PILOT _____

COPILOT LW _____

6.14 Roll 2D on Table P-6, Tail Section, to determine shell hit damage to the Tail Section: "7" = Rudder. Note one rudder hit in the Damage Notes section of the MC.

B-17 DAMAGE NOTES:
RUDDER HITS: 1

6.15 The German Fighter which hit the B-17 makes ▪ Successive Attack. Roll 2D on Table B-6, Successive Attacks, to determine the new attack position of the FW 190: "5" = 12 O'Clock Level.

6.16 The FW 190 fighter card is placed at 12 O'Clock, half on the mapboard (Level). According to Table M-1, only the Top Turret and Nose Guns may fire at this position, and both need to roll a 6 to hit. However, the special rules for the Tail Guns, rules section 9.2, allow the Tail Guns a passing shot at the fighter after the German Offensive Fire Phase. Mark off ammunition for the Top Turret and Nose Guns. Neither of these positions roll a 6, so the fighter attacks needing to roll ▪ 5 or 6. It fails, but is not removed from play yet because the Tail Guns now get their shot as the fighter passes the rear of B-17. Mark off one box of ammunition for the Tail Guns. The Tail Guns must roll a 6 to hit (according to rules section 9.2) and fail. Now the fighter is removed from play. This ends fighter attacks for Turn 5.

7.0 TURN 5—TARGET FLAK (ANTI-AIRCRAFT FIRE)

7.1 Roll 1D on Table O-2, Flak Over Target, to determine how heavy the German flak is over the target: "4" = Medium flak.

7.2 Roll 2D three times (as indicated) on Table O-3, Flak to Hit B-17, under the Medium column, to determine if flak hits the B-17: "5" = Miss; "7" = Hit; "8" = Miss. The B-17 has taken one flak hit.

7.3 Roll 1D on Table O-4, Effects of Flak Hits, to determine the effect of each flak hit: "7" = 1 hit. The flak hit is the equivalent of one shell hit.

7.4 Roll 2D on Table O-5, Area Affected by Flak Hits, to determine where the flak shell has hit the B-17: "6" = Port Wing. Record the Port Wing hit in the Hit Notes section of the MC.

7.5 Roll 2D on Table Bl-1, Wing, to determine the damage to the Port Wing from the flak shell hit: "12" = Landing Gear. Roll 1D: "4" = Landing Gear Inoperable. Note that the landing gear is inoperable in the Damage Notes section of the MC, and circle the "–3" box in the row "Land" of the Landing Modifiers section.

LANDING MODIFIERS:

WATER	+1	0	–1	–2	
LAND	✗	✗	✗	✗	–3

8.0 TURN 5—BOMB RUN

8.1 Roll 1D on Table O-6, Bomb Run, to determine whether the bombs land on or off target: "5" – 1 (B-17 hit by flak over target) = "4" = On Target.

8.2 Roll 2D on Table O-7, Bombing Accuracy, to determine the percentage of the bombs hitting within 1000 feet of the aiming point: "9" = 20%. Note "20%" in the Bomb Run % section of the MC.

BOMB RUN % _20%_

8.3 The Bomb Run completes Turn 5 and the outward leg of the mission.

9.0 TURN 6

9.1 The B-17 counter remains in Zone 5, but is rotated to point toward England.

9.2 There is no fighter cover in this zone. Roll for German fighter waves on Table B-2 (Zone 5 is the target zone): "4" – 1 = "3" = One wave.

9.3 Roll on Table B-3: "5" and "4" = "54" = Four 109's: 12 O'Clock Low, 12 O'Clock Level, 12 O'Clock High, and 9 O'Clock High. Record "54" on the MC. Place the four Me 109 fighter cards on the mapboard in their attack positions.

9.4 Examine Table M-1 to find which guns can bear on these fighters. Allocate the fire of the guns by placing the gun markers on the target fighters as follows:

—Me 109 at 12 O'CLock Low: Ball Turret
—Me 109 at 12 O'Clock Level: Nose and Tail Guns (Tail Guns must wait to attack, see rules section 9.2)
—Me 109 at 12 O'Clock High: Top Turret
—Me 109 at 9 O'Clock High: Port Waist

Mark off one ammo box for each gun on the MC, except for the Tail Guns which will fire later.

9.5 Roll 1D on Table M-1 for each gun firing now:

—Ball Turret: "4" = Miss
—Nose Guns: "4" = Miss
—Top Turret: "1" = Miss
—Port Waist: "1" = Miss

9.6 Roll 1D on Table M-3 for each of the German fighter attacks:

—Me 109 12 O'Clock Low: "6" = Hit
—Me 109 12 O'Clock Level: "1" = Miss (Don't remove from play yet—this fighter is the target of the Tail Guns passing attack)
—Me 109 12 O'CLock High: "2" = Miss (Remove from play)
—Me 109 9 O'Clock High: "5" = Hit

9.7 Roll 2D on Table B-4 once for each of the two Me 109's above which hit the B-17 to determine how many shells have hit:

—Me 109 12 O'Clock Low: "4" = 2 hits
—Me 109 9 O'Clock High: "6" = 2 hits

Record on the MC under Hit Notes: 2 hits—12 Lo; 2 hits—9H.

9.8 Roll 2D on Table B-5 for each of the four hits to determine which area of the B-17 they hit:

—12 Lo: "6" = Nose; "7" = Bomb Bay
—9 H: "9" = Radio Room; "7" = Tail Record on the MC under Hit Notes: Nose, BB, RR, Tail.

9.9 Roll 2D on Table P-1 to determine damage to the Nose Compartment: "6" = Bombardier. Roll 1D on Table Bl-4 to determine wound: "5" = Bombardier seriously wounded. Record on the MC that the Bombardier is seriously wounded, and mark his counter on the Crew Placement Board with a seriously wounded marker. Cross out the note "Nose" on the MC to show that the shell hit in the Nose has been resolved.

9.10 Roll 2D on Table P-3 to determine damage to the Bomb Bay: "4" = Rubber Rafts. Record on the MC under Damage Notes that the Rubber Rafts are destroyed. Record on the MC that the dice roll for a landing in water is -6. Cross out the note "BB" on the MC.

9.11 Roll 2D on Table P-4 to determine Radio Room damage: "6" = Radio Operator. Roll 1D on Table Bl-4 for wounds: "2" = Light wound. Mark the Radio Operator as lightly wounded on the MC and Crew Placement Board. Cross out the note "RR" on the MC.

9.12 Roll 2D on Table P-6 to determine Tail damage: "7" = Rudder. Record on the MC that the rudder has taken a second hit. Cross out the note "Tail" on the MC.

9.13 Mark off one box of ammo for the Tail Guns. Roll 1D according to rules section 9.2 for the Tail Guns' passing shot at the Me 109 attacking from 12 O'Clock Level: "2" = Miss. This fighter is now removed from play since it failed to score a hit.

9.14 Roll 2D twice on Table B-6 to determine successive attack positions for the two Me 109s which hit the B-17: "6" = 10:30 Level; "7" = 12 O'Clock High. Place Me 109 fighter cards in these positions.

9.15 Allocate B-17 defensive fire according to Table M-1:

—Me 109 10:30 Level: Port Cheek and Tail Guns (Tail Guns must again wait to fire)
—Me 109 12 O'Clock High: Top Turret (Nose Guns can't fire because the Bombardier was seriously wounded during this attack and the Navigator is firing the cheek gun.) Place MG markers on the target fighters and mark off ammo on the MC for the firing guns.

9.16 Roll 1D on Table M-1 for each firing gun:

—Port Cheek: "1" = Miss
—Top Turret: "3" = Miss

9.17 Roll 1D on Table M-3 for each of the attacking fighters:

—Me 109 10:30 Level: "5" = Hit
—Me 109 12 High: "3" = Miss (Remove from play)

9.18 Resolve the successful attack from the fighter at 10:30 Level:

—Roll 2D on Table B-4: "7" = 1 hit (Record "1 H 10:30 Le" on the MC)
—Roll 2D on Table B-5: "10" = Superficial Damage (no effect)

The fighter's hit has no effect. Cross out the note "1 H 10:30 Le" on the MC.

9.19 Mark off one Tail Gun's ammo box on the MC. Roll 1D according to rules section 9.2 for the Tail Guns passing shot at the Me 109 attacking from 10:30 Level: "6" = Hit. Roll 1D on Table M-2: "2" + 1 (Twin guns bonus) = "3" = FBOA, fighter breaks off attack. The fighter is removed from play. (If not hit by the Tail Guns, this fighter would have returned for a second successive attack.) This ends fighter attacks for Turn 6.

10.0 TURN 7

10.1 Miss Cue moves into Zone 4, headed toward England.

10.2 Roll 1D on Table G-5 to determine fighter cover: "5" = Good cover. Record Good cover on the MC in Zone 4 under "Back".

10.3 Roll 1D on Table B-1 to determine German fighter waves: "4" – 1 = "3" = One wave. Roll on Table B-3 to determine size and position of the wave: "5" and "2" = "52" = Two 110s: 6 Level and 9 Low. Record "52" under Zone 4 on the MC, and place two Me 110 fighter cards in the attack positions.

10.4 Roll 1D on Table M-4 to determine fighter cover defense: "4" = 2(1). Since this result means 2 fighters are driven off from the initial attack (and 1 fighter from each successive attack), and since the wave consists only of 2 fighters, the wave attack is over. Cross out the note "52" on the MC.

10.5 Crew movement can now take place with no penalty, according to rules section 14.1. The seriously wounded Bombardier is moved to the Radio Room. The Radio Operator moves to the Nose to operate the cheek guns or Nose Guns.

Move the crew counters to their new positions on the Crew Placement Board.

10.6 Miss Cue has safely passed through Zone 4, and now enters Zone 3.

11.0 TURN 8

11.1 Miss Cue enters Zone 3, pointed toward England.

11.2 Roll 1D on Table G-5 for fighter cover: "6" = Good cover. Record Good cover on the MC in Zone 3 under "Back".

11.3 Roll on Table B-1 to determine German fighter waves: "4" – 1 = "3" = One wave. Roll 2D on Table B-3 to determine the size and position of the wave: "6" and "1" = "61" = 109: Vertical Dive (d). Place an Me 109 fighter card directly on top of the B-17, and record "61" on the MC under Zone 3.

11.4 According to Note (d), Table B-3, Miss Cue's Good fighter cover has no effect on the diving attack. Only the Radio Room and Top Turret Guns may fire defensively. However, the Radio Operator has moved forward to the Nose, and the Radio Room Gun is unmanned (the seriously wounded Bombardier here cannot man the gun). Only the Top Turret may fire, and according to Note (d), it must roll a 6 to hit. Mark off one box of ammo for the Top Turret and roll 1D: "4" = Miss.

11.5 Roll 1 D on Table M-3 for the German fighter's attack: "4" = Miss. Remove the fighter from play. This ends fighter attacks in Zone 3.

11.6 Miss Cue has safely passed through Zone 3, and into Zone 2.

12.0 TURN 9

12.1 Miss Cue enters Zone 2 (over the English Channel), pointed toward England.

12.2 Roll 1D on Table G-5 for fighter cover: "2" = Poor cover. Record Poor cover on the MC in Zone 2 under "Back".

12.3 Roll 1D on Table B-1 to determine German fighter waves: "3" – 3 = "0" = None. No German fighters attack.
12.4 Miss Cue has safely passed through Zone 2, and enters Zone 1.

13.0 TURN 10

13.1 Miss Cue enters Zone 1, and is placed on the 8th Air Force Base.

13.2 Roll 2D on Table O-1 to determine the weather conditions at the base: "10" = Good weather. There is no modification to the landing roll due to weather.

13.3 Roll 2D on Table G-9 to resolve Miss Cue's landing: "7" – 3 (landing gear inoperable) = "4" = Crew and B-17 down safely.

14.0 POST-MISSION DEBRIEFING

14.1 Roll 1D according to Note (b) of Table Bl-4 to determine the survival of the seriously wounded Bombardier: "1" = Rapid recovery, may fly on next mission.

14.2 Record the Bomb Run percentage, 20%, on the Composite Mission Record. Also, record the Me 110 kill credited to the Tail Gunner.

14.3 Since the Bomb Run was On Target and Miss Cue returned not irreparably damaged, this mission is considered an 8th Air Force Victory.

B-17 COMPOSITE MISSION RECORD

MISSION #	NAME OF B-17	CITY AND TARGET TYPE	BOMB RUN %	BOMBARDIER Lieut.	NAVIGATOR Lieut.	PILOT Capt.	CO-PILOT Lieut.	ENGINEER Mst. Sgt.	RADIO OPERATOR Sgt.	BALL TURRET Sgt.	PORT WAIST Sgt.	STARBD. WAIST Sgt.	TAIL GUNNER Sgt.
1	●												
2	●												
3	●												
4	●												
5	●												
6	●												
7	●												
8	●												
9	●												
10	●												
11	Miss Cue	Paris/Ind.	20%	VINCE FRATTALI	RICH HAMBLEN	GLEN FRANK	BOB GREENWOOD	DALE SHEFFER	MICK UHL	REX MARTIN Me-110	JOE BARKOSKI Me-110	BILL HUGHES	ERNIE SHELLEY

B-17 QUEEN OF THE SKIES MISSION CHART

SAMPLE

BOMBER NAME: _MISS CUE_

MISSION # _11_ (THIS BOMBER _1_)

TARGET CITY: _PARIS_

B-17 POSITION IN FORMATION:

- [ ] LEAD (+1 Me 109/12 High)
- [x] MIDDLE
- [ ] TAIL (+1 Me 109/6 High)
- [ ] OUT OF FORMATION (+1 Me 109/12 Level/Wave)
- [ ] ≤ 10,000 FT. (2×Die Light Flak Over Land)

FIGHTER WAVES:

ZONE	2 -3	3 -1	4 -1	5 -1	6	7	8
OUT	X	32	56	44			
BACK	X	64	52	54			

CREW NOTES:

BOMBARDIER	SW - Rapid Recovery
NAVIGATOR	___ RADIO OPERATOR _LW_
PILOT	___ BALL GUNNER _ME-110_
COPILOT	_LW -_ PORT WAIST ___
ENGINEER	___ STARBD. WAIST ___
	TAIL GUNNER ___

B-17 DAMAGE NOTES:
RUDDER HITS: //
LANDING GEAR OUT
RUBBER RAFTS - X

WEATHER:

TARGET - _GOOD_

ENGLAND - _GOOD_

SQUADRON POSITION:

- [ ] HIGH
- [x] MIDDLE (-1)
- [ ] LOW (+1)

TARGET TYPE: _INDUSTRY_

LANDING MODIFIERS:

WATER	X	X	X	-6
LAND	X	X	X	-3

AMMO: START GUN

15	NOSE	
10	PORT CHEEK	
10	STARBD. CHEEK	
16	TOP TURRET	
10	RADIO	
20	BALL TURRET	
20	PORT WAIST	
20	STARBD. WAIST	
23	TAIL	

HIT NOTES: 3H - 12 H : Pc : TMc
FLAK : PORT WING
2H - 12 LO : NOSE - BB
2H - 9 H : RR - TMC
1H - 10:30 LE -

FIGHTER COVER:
	OUT	BACK
ZONE 2	F / P	P
ZONE 3	G	G
ZONE 4	P	G

BOMB RUN % _20%_

8510003
W423
4/83

15

B-17 COMPOSITE MISSION RECORD

SAMPLE

MISSION #	NAME OF B-17	CITY AND TARGET TYPE	BOMB RUN %	BOMBARDIER Lieut.	NAVIGATOR Lieut.	PILOT Capt.	CO PILOT Lieut.	ENGINEER Mst. Sgt.	RADIO OPERATOR Sgt.	BALL TURRET Sgt.	PORT WAIST Sgt.	STARBO. WAIST Sgt.	TAIL GUNNER Sgt.
1	QUEENIE	ST. OMER - AIRFIELD	50	JIM HAMMICUT	WILLIE MOORE	HOWARD LARSON	RALPH SEEFELD	JIM BESSARD	MIKE DUSATTA	HERB RUTLEDGE	TOM LYBEK	CHESTER THOMPSON	TOM JUCHIEM
2	QUEENIE	AMIENS - RAILYARD	20	√	√	√	√	√	MARK HEMPHILL	√	√	√	√
3	QUEENIE	ABBEVILLE - A/B FIELD	10	√	√	X	RALPH ASHBA	√	√	√	√	ME-109	√
4	QUEENIE	MEAULTE - AIRCRAFT	30	√	√	TOM CONAN	JEFF PFEIFFER	ME-109	√	√	JASON GILBERT	√	√
5	QUEENIE	LILLE - INDUSTRY	30	√	√	√	X		DENNIS PINNEY	GARY SHEAFFER	√	√	BILL STRICKLER
6	QUEENIE	ROUEN - RAILYARD	0	√	√	√	√			√	√	√	√
7	QUEENIE	MEAULTE - AIRCRAFT	30	√	√	TOM MURPHY	PAUL NOVAK			√	√	√	√
8	QUEENIE	ROUEN - RAILYARD	50	X	√	√	X		X	√	CHIP	JOHN DISNACK	√
9	QUEENIE	ANTWERP - INDUSTRY	20	JOHN HUFFIN CORLETT	RICH HAMBLEN	GLEN FRANK	WAYNE BUBOL	DALE SHEAFFER	MICK UHL	REX ME-110	GENE BALKOSKI	BILL HUGHES	BRUCE SHELLEY
10	QUEENIE	ROTTERDAM - SHIPYARD	40	X	√	X	DON GREENWOOD	X	X	ME-110 MARTIN	√	√	√
11	MISS CUE	PARIS - INDUSTRY	30	VINCE PRATTALI	√	√	√	√	DARYL SCHWEITFELZ	ME-110	√	√	KAREN KNEZEVICH
12	MISS CUE	RENNES - RAILYARD	40	√	√	√	X		ME-109	X	X	√	√
13	MISSCUE	HAMM - RAILYARD	5	HENRY BRUMIRSKY	MARK AMES	GARY PFEIFFER	BERNARD KELLY		ME-109	√	√	√	√
14	MISS CUE	AMIENS - AIRFIELD	40	X	FW-190	√	√		√	√	√	√	√
15	MISS CUE	ROMILLY S.S. - AIRCRAFT	0	√	ME-109	STEVE EDWARDS	MATT HEMPHILL	MIKE GILBERT	√	PAUL DYER	JAMES ST. JOHN	BOB ANDERSON	√
16	BELLE	BREST - U-BOATS	98	√	√	X	√		√	√	√	√	√
17	BELLE	ROTTERDAM - SHIPYARD	60	ME-110	ME-109	√	√	ME-109	√	√	√	√	√
18	BELLE	ST. OMER - AIRFIELD	10	ME-110	ME-109	√	√	√	√	√	√	√	√
19	BELLE	BREMEN - AIRCRAFT	0	CAPTURED	CAPTURED	CAPTURED	CAPTURED	ME-109 CAPTURED FW-190	CAPTURED	CAPTURED	√	CAPTURED ME-109	√
20	BOMBSHELL BETTY	EMDEN - INDUSTRY	30	ED COLEMAN	CARL GEBHART	ARNOLD BLUMBERG	ADOLPH STEINER	BILL WOLFE	VICTOR LUTZE	TOM SHAW	MARTIN STRASSER	BRIAN GILBERT	RYAN GANTRY
21	ZOOT SUIT	BREMEN - AIRCRAFT	20	CAB ME-109 CALLONAH	JOE SIMPKINS	√	√	STU FW-110 WELLS	RUTH GALLUN	ME-110	JIM CONOVER	ME-109	ELMER ME-110 GANTRY
22	ZOOT SUIT	VEGESACK - U-BOATS	30	X	√	√	√	√	√	√	√	√	√
23	ZOOT SUIT	HAMM - RAILYARD	5	X	X	X	ADOLPH STEINER	CAPTURED	CAPTURED	CAPTURED	√	X	X
24	POPPA BEAR	ST. NAZAIRE - U-BOATS	30	GEORGE ME-110 BERG	BILL SCHMITZ	BOB COCORAS	√	MARK BERBER	JIM HENRY	TOM GESME	RALPH CIMIREN	BRUCE HUNTER	ED MARTON
25	POPPA BEAR	EMDEN - INDUSTRY	10	X	X	X	X		X		X	X	X

The idea for **B-17: QUEEN OF THE SKIES** came to me about halfway through a reading of Martin Caidin's **Flying Forts** (which was out of character for me because I am much more likely to be reading a book on WW II armor than on airpower). In the middle of a particularly action packed account of fighters attacking a B-17 an "inspirational flash" came over me quite unexpectedly, and I realized that a game could be designed to include most of the details of aerial warfare being described. I knew that most of the WW II air power games available were much more strategic in nature. They all dealt with large numbers of planes, and avoided great detail.

I wanted to design a game which would cover the experience of just one plane in great detail. I decided at the same time to design the game for solitaire play, with the option of two player rules included. I felt that there was a need for a game you can go out and buy and play without having to invite, and coordinate the arrival of, up to a half-dozen friends. With **B-17**, you can have it either way.

You can't design a game by reading just one book, so I immediately went out and bought as many books on the B-17 as I could find (see the bibliography). By the time I had finished a few of them, I realized that I would have to limit the time frame of the game. I chose November 1942 to May 1943 because that was the initial period of B-17 operations in the European Theatre, when the B-17 had to prove itself against great odds. Fighter cover for B-17's at that time extended only about 150 miles from their bases, meaning more danger beyond that range. At the same time, the Germans had not yet learned the best techniques for attacking B-17 formations. I felt that if the game was designed to cover a later part of the war, it would necessarily be unbalanced. For example, if it accurately covered the period around the Schweinfurt ball-bearing factory raids, the Germans should come out ahead. If it covered the last year of the war when the Allies were consolidating their domination of the skies, the B-17's should come out ahead. Many B-17 pilots and crew members I talked to who had been in the later period said that they never saw any German fighters, even in 50 missions, due to our vastly improved fighter cover.

I estimate that I spent well over 600 hours in the research and design of **B-17**, not including playtesting. The system of tables was revised many times, always with the idea of consolidating as much information as possible into one table. I wanted to reduce the number of dice rolls necessary, while still maintaining maximum realism. I was fortunate in being able to take a tour of an existing B-17 owned by the Experimental Aircraft Association of Wisconsin. This was very helpful in that I was able to stand or kneel at all of the gun positions and determine the angles of fire for the guns in a much better way than had been possible on my scale model of a B-17. However, using 72nd scale models of both the B-17 and the German fighters was extremely important, expecially in determining what sections of the B-17 could be hit from each angle of attack, and in measuring the percentage of the B-17's surface area exposed to each angle of attack. This allowed me to extrapolate percentages for the dice rolls on the damage tables.

B-17: QUEEN OF THE SKIES is action packed and bloody for both the Americans and the Germans. This does not just provide an exciting game, but reflects the situation at the time. If you were a B-17 crew member from November 1942 to May 1943, you had only about a 30% chance to survive 25 missions. By the time you finish playing **B-17** just once, you should have a feel for what it was like to be a B-17 crew member under attack, with nowhere to duck, hide, or run. You've got to sit there and take what comes, trading bullet for bullet and sweat for sweat.

My own bias in gaming is toward realism and accuracy, and I have always been dismayed when a designer says he sacrificed realism for playability. In **B-17** I tried to maintain both maximum realism and playability. I think that if a designer is willing to take the time, it can be done, and I hope that **B-17** has given you both.

Glen Frank

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COMPONENTS

11″ × 16″ Mounted Mapboard
Counter Sheet: 88 Pieces
16 Die Cut German Fighter Cards
Crew Placement Board
Strategic Movement Board
Mission Chart Pad
Charts and Tables Cards
Rulebook
2 Six-Sided Dice

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B-17 RULES BOOKLET OUTLINE

ERRATA

1. The 5 fire extinguisher counters are placed on the Crew Placement Board in the box near the starboard waist position.
2. The notes to Table G-10 also apply to Table G-9.
3. Table P-3, Bomb Bay, result "4" = Rubber Rafts = The Rubber Rafts are unusable, and the roll on Table G-10 when landing in water is –6.

B-17 TABLES AND CHARTS

O = Orange card; P = Pink card; B = Buff card; Bl = Blue card; G = Green card; M = Map

O-1 WEATHER
O-2 FLAK OVER TARGET
O-3 FLAK TO HIT B-17
O-4 EFFECT OF FLAK HITS
O-5 AREA AFFECTED BY FLAK HITS
O-6 BOMB RUN
O-7 BOMBING ACCURACY

P-1 NOSE
P-2 PILOT COMPARTMENT
P-3 BOMB BAY
P-4 RADIO ROOM
P-5 WAIST
P-6 TAIL SECTION

B-1 NUMBER OF GERMAN FIGHTER WAVES IN
   NON-DESIGNATED TARGET ZONE
B-2 NUMBER OF GERMAN FIGHTER WAVES
   IN DESIGNATED TARGET ZONE
B-3 ATTACKING FIGHTER WAVES
B-4 SHELL HITS BY AREA
B-5 AREA DAMAGE TABLES
B-6 SUCCESSIVE ATTACKS
B-7 RANDOM EVENTS

BL-1 WINGS
BL-2 INSTRUMENTS
BL-3 HAND HELD EXTINGUISHERS
BL-4 WOUNDS
BL-5 FROSTBITE

G-1,2,3 MISSION TARGETS
G-4 B-17 FORMATION POSITION
G-5 FIGHTER COVER
G-6 CONTROLLED BAILOUT
G-7 BAILOUT FROM UNCONTROLLED PLANE
G-8 BAILOUT OVER WATER
G-9 LANDING ON LAND
G-10 LANDING IN WATER
G-11 FLIGHT LOG GAZETTEER

M-1 B-17 DEFENSIVE FIRE
M-2 HIT DAMAGE AGAINST GERMAN FIGHTER
M-3 GERMAN OFFENSIVE FIRE
M-4 FIGHTER COVER DEFENSE
M-5 B-17 AREA SPRAY FIRE
M-6 FIGHTER PILOT STATUS

B-17 QUEEN OF THE SKIES MISSION CHART

BOMBER NAME: _____

MISSION # _____ (THIS BOMBER _____)

TARGET CITY: _____

TARGET TYPE: _____

B-17 POSITION IN FORMATION:

- ☐ LEAD (+1 Me 109/12 High)
- ☐ MIDDLE
- ☐ TAIL (+1 Me 109/6 High)
- ☐ OUT OF FORMATION (+1 Me 109/12 Level/Wave)
- ☐ ≤ 10,000 FT. (2 × Die Light Flak Over Land)

SQUADRON POSITION:

- ☐ HIGH
- ☐ MIDDLE (−1)
- ☐ LOW (+1)

WEATHER:

TARGET- _____

ENGLAND- _____

LANDING MODIFIERS:

WATER	+1	0	−1	−2
LAND	+1	0	−1	−2

BOMB RUN % _____

FIGHTER COVER:

	OUT		BACK
ZONE 2			
ZONE 3			
ZONE 4			

AMMO: START GUN

15	NOSE	
10	PORT CHEEK	
10	STARBD. CHEEK	
16	TOP TURRET	
10	RADIO	
20	BALL TURRET	
20	PORT WAIST	
20	STARBD. WAIST	
23	TAIL	

FIGHTER WAVES:

	2	3	4	5	6	7	8
ZONE							
OUT							
BACK							

CREW NOTES:

- BOMBARDIER _____
- NAVIGATOR _____
- PILOT _____
- COPILOT _____
- ENGINEER _____
- RADIO OPERATOR _____
- BALL GUNNER _____
- PORT WAIST _____
- STARBD. WAIST _____
- TAIL GUNNER _____

HIT NOTES:

B-17 DAMAGE NOTES:

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B-17 COMPOSITE MISSION RECORD

MISSION #	NAME OF B-17	CITY AND TARGET TYPE	BOMB RUN %	BOM BARDIER Lieut.	NAVI GATOR Lieut.	PILOT Capt.	CO PILOT Lieut.	ENGINEER Mst. Sgt.	RADIO OPERATOR Sgt.	BALL TURRET Sgt.	PORT WAIST Sgt.	STARBD. WAIST Sgt.	TAIL GUNNER Sgt.
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													

B-17 QUEEN OF THE SKIES COUNTERSHEET

B-17 POSITION	PILOT	COPILOT	BOM-BARDIER	NAVI-GATOR	ENGI-NEER	RADIO OPER-ATOR	BALL GUNNER
PORT WAIST GUNNER	STRBD. WAIST GUNNER	TAIL GUNNER	NOSE	STRBD. CHEEK MG	PORT CHEEK MG	TOP TURRET MG's	RADIO ROOM MG
BALL TURRET MG's	PORT WAIST MG	STRBD. WAIST MG	TAIL MG's	ENGINE FIRE	ENGINE FIRE	ENGINE FIRE	FUEL TANK FIRE BAILOUT
OIL LEAK	OIL LEAK	OXYGEN FIRE	OXYGEN FIRE	GAS LEAK 1st	GAS LEAK 2nd	GAS LEAK 3rd	PORT AILERON
STRBD. AILERON	PORT FLAP	STRBD. FLAP	PORT ELEVATOR	STRBD. ELEVATOR	RUDDER	ENGINE	ENGINE
ENGINE	EXTIN-GUISHER	EXTIN-GUISHER	EXTIN-GUISHER	EXTIN-GUISHER	EXTIN-GUISHER	EXTIN-GUISHER	LIGHT WOUND
LIGHT WOUND	LIGHT WOUND	LIGHT WOUND	LIGHT WOUND	LIGHT WOUND	SERIOUS WOUND	SERIOUS WOUND	SERIOUS WOUND
SERIOUS WOUND	SERIOUS WOUND	SERIOUS WOUND	FIGHTER CON- -1 TINUES	FIGHTER CON- -1 TINUES	FIGHTER CON- -1 TINUES	FIGHTER CON- -1 TINUES	FIGHTER CON- -1 TINUES
FIGHTER BREAKS OFF -2	FIGHTER BREAKS OFF -2	FIGHTER BREAKS OFF -2	FIGHTER BREAKS OFF -2	FIGHTER BREAKS OFF -2	ACE	ACE	ACE
ACE	ACE	GREEN	GREEN	GREEN	GREEN	GREEN	SPRAY FIRE
SPRAY FIRE	SPRAY FIRE	SPRAY FIRE	SPRAY FIRE	SPRAY FIRE			

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10:30 1:30

3:00

12:00

6:00

9:00

VERTICAL CLIMB

M-2 HIT DAMAGE AGAINST [SINGLE] FIGHTER

(Roll one die for each hit result from Table M-1).

ROLL	EFFECT
1,2	...
3,4	FBOA (Fighter damaged and breaks off after this attack -2)
5,6	...

Notes: a) Twin guns (Ball and Top Turrets and Tail Guns) [] +1 to die roll, except against FE 190.
b) All damage die rolls against [] 190 are -1, unless firing gun [] a twin gun which roll damage normally.

M-3 GERMAN OFFENSIVE FIRE

Fighter [] hit B-17, roll one die per fighter.

ATTACK POSITION	ROLL TO HIT B-17
12 High, Level Low	5,6
1:30/10:30 High, Low	...
3/9 High, Level, Low	4,5,6
6 High, Level, Low	3,4,...
Vertical Dive	5,6

Notes: Regardless of any modifiers in effect, a roll of [] is always a hit. If the result is [] hit, go to Table B-4 to determine the number of shells hitting the B-17 from this fighter. Fighters which don't score hits are removed from the board.

M-4 FIGHTER COVER DEFENSE

Roll one die for each wave.

ROLL	POOR COVER	FAIR COVER	GOOD COVER
1	...	0 (0)	1 (0)
2	0 (0)	0 (0)	1 (0)
3	0 (0)	1 (0)	2 (1)
4	1 (0)	1 (0)	2 (1)
5	1 (0)	2 (1)	3 (2)
6	...	...	3 (2)

Notes: The first number is the number of fighters driven off in the initial attack phase. The number in parentheses is the number of fighters driven off in Successive Attack phases.

FIGHTER PILOT STATUS (Optional)

Roll [] dice per fighter.

ROLL	STATUS
2,3	Green: Fighter -1 to hit ...
4-10	Average: No modification.
11,12	Ace: Fighter +1 to hit B-17 ...

M-5 B-17 AREA SPRAY FIRE (Optional)

Roll [] die per [] using spray fire. (a)

ROLL	EFFECT
1	MG Jams (b)/Fighter attacks normally
2	Fighter breaks off without fire
3	Fighter attacks normally
4	Fighter breaks off without ...
5	Fighter attacks normally
6	...

Notes: a) Spray Fire may only [] used against 3, 6, 9, or Vertical Climb attacks, not against 12, 1:30, 10:30 [] Vertical Dive attacks.
b) [] gunner may attempt to fix [] jammed gun each time the B-17 enters [] zone. Roll one die: 1,2- gun fixed; 3,4,5-gun remains jammed; 6- gun broken permanently.

B-17
QUEEN OF THE SKIES

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M-1 B-17 DEFENSIVE FIRE

Fighter Attack From:	B-17 MG's with Field of Fire:	Roll needed on one die to hit:
12 High	Top Turret, Nose	190, 110, 109--6
12 Level	Top Turret, Nose	190, 110, 109--6
12 Low	Ball Turret, Nose	190, 110, 109--6
1:30 High	Top Turret, Starboard Cheek, Starboard Waist	190, 110, 109--6
1:30 Low	Ball Turret, Starboard Cheek	190, 110, 109--6
10:30 High	Top Turret, Port Cheek, Port Waist	190, 110, 109--6
10:30 Level	Ball Turret, Port Cheek	190, 110, 109--6
10:30 Low	Ball Turret, Port Cheek	190, 110, 109--6
3 High	Top Turret	190, 109--5,6 / 110--4,5,6
3 Level	Starboard Waist	190, 110, 109--6 / 110--4,5,6
	Top & Ball Turrets	190, 110, 109--6
3 Low	Starboard Waist	190, 110, 109--6 / 110--4,5,6
	Ball Turret	190, 110, 109--5,6
9 High	Starboard Waist	110--4,5,6
	Top Turret	190, 110, 109--5,6
9 Level	Port Waist	190, 110, 109--6
	Top & Ball Turrets	110--4,5,6
	Port Waist	190, 110, 109--5,6
9 Low	Ball Turret	110--4,5,6
6 High	Port Waist	190, 110, 109--4,5,6
	Top Turret	110--4,5,6
	Radio Room	190, 110, 109--6
	Tail Guns	190, 109--4,5,6 / 110--3,4,5,6
	Tail Guns	190, 109--4,5,6 / 110--3,4,5,6
6 Low	Ball Turret	190, 109--3,4,5,6 / 110--3,4,5,6
	Tail Guns	190, 109--4,5,6 / 110--3,4,5,6
Vertical Climb & Vertical Dive	See instructions on Table B-3	

Notes: a) 190 = FW 190, 110 = ME 110, and 109 = ME 109.
b) Regardless of any modifiers in effect, a roll of [] is always a hit. If the result is a hit, go [] Table M-2 [] determine damage.
c) An Ace Gunner (credited with [] kills) adds 1 to all Defensive Fire rolls.

B-5 AREA DAMAGE TABLES

B-17 compartment sections hit from each attack area. Roll 2D for each shell hit, and then go to appropriate Tables P-1 through P-6 and B1-1,2 to determine specific damage for each hit.

ATTACK FROM: 12 / 1:30 / 10:30

	HIGH		LEVEL		LOW
ROLL	AREA HIT	ROLL	AREA HIT	ROLL	AREA HIT
2-4	Superficial Damage	2	Port Wing	2-4	Superficial Damage
▮	Radio Room	3-5	Superficial Damage	5	Radio Room
6	Nose	6	Port Wing	6	Nose
7	Pilot Compt.	7	Nose	7	Bomb Bay
8	Wing: Roll 1D- 1-3 = Port 4-6 = Starbd.	8	Starboard Wing	8	Wing: Roll 1D- 1-3 = Port 4-6 = Starbd.
9	Waist	9	Pilot Compt.	9	Waist
10	Tail	10-11	Superficial Damage	10	Tail
11	Bomb Bay			11	Pilot Compt.
12	Walking Hits/ Fuselage (a)	12	Starboard Wing	12	Walking Hits/ Fuselage (a)

ATTACK FROM: ▮ /9

	HIGH		LEVEL		LOW
ROLL	AREA HIT	ROLL	AREA HIT	ROLL	AREA HIT
2	Walking Hits/ Wings (b)	2	Bomb Bay	2	Walking hits/ Wings (b)
3	Nose	3	Wing-Attacking Side	3	Nose
4	Pilot Compt.	4	Nose	4	Bomb Bay
5	Bomb Bay	5	Waist	5	Radio Room
6	Port Wing	▮	Wing-Attacking Side	6	Tail
7	Tail	7-8	Superficial Damage	7	Port Wing
8	Starboard Wing	9	Tail	8	Starboard Wing
▮	Radio Room	10	Radio Room	9	Superficial Damage
10	Waist	11	Pilot Compt.	10	Waist
11	Superficial Damage	12	Walking Hits/ Fuselage (c)	11	Pilot Compt.
12	Walking Hits/ Fuselage (a)			12	Walking Hits/ Fuselage (a)

ATTACK FROM: 6 O'CLOCK

	HIGH		LEVEL		LOW
ROLL	AREA HIT	ROLL	AREA HIT	ROLL	AREA HIT
2-3	Superficial Damage	2-3	Superficial Damage	2	Nose
4	Radio Room	4-5	Tail	3-4	Superficial Damage
5	Bomb Bay			5	Bomb Bay
6	Port Wing	▮	Port Wing	6	Port Wing
7	Tail	7	Tail	7	Tail
8	Starboard Wing	8	Starboard Wing	8	Starboard Wing
9	Waist	9-10	Tail	9	Waist
10	Pilot Compt.			10	Radio Room
11	Walking Hits Fuselage	11	Waist	11	Walking Hits/ Fuselage (a)
12	Nose	12	Superficial Damage	12	Pilot Compt.

	VERTICAL DIVE		VERTICAL CLIMB
ROLL	AREA HIT	ROLL	AREA HIT
2-3	Superficial Damage	2-3	Superficial Damage
4	Bomb Bay	4	Bomb Bay
5	Radio Room	5	Tail
6	Port Wing	6	Port Wing
7	Walking Hits/ Fuselage (a)	7	Radio Room
8	Starboard Wing	8	Starboard Wing
9	Pilot Compt.	9	Walking Hits/ Fuselage (a)
10	Tail	10	Pilot Compt.
11	Waist	11	Waist
12	Nose	12	Nose

Notes: ▮ "walking hits" result negates all other shell hits by this fighter for this attack, and does the following damage:
a) 1 shell ▮ in each of the following sections—Nose, Pilot Compartment, Bomb Bay, Radio Room, Waist and Tail.
b) 2 shell hits on each Wing.
c) ▮ shell ▮ in each of the following sections: Nose, Wing (attacking side), Waist, and Tail.

NOSE

BOMBARDIER

NAVIGATOR

PILOT

COPILOT

NOSE

PILOT COMPARTMENT

ENGINEER

PILOT COMPARTMENT

BOMB BAY

BOMB BAY

RADIO ROOM

RADIO ROOM

RADIO OPERATOR

BALL GUNNER

WAIST

PORT WAIST GUNNER

STARBOARD WAIST GUNNER

WAIST

TAIL

TAIL

TAIL GUNNER

B-17 CREW PLACEMENT BOARD

B-1 NUMBER OF GERMAN FIGHTER WAVES IN NON-DESIGNATED TARGET ZONE

Roll 1D.

ROLL	WAVES
1-2	None
3-5	1*
6	2*

*Go to Table B-3

B-2 NUMBER OF GERMAN FIGHTER WAVES IN DESIGNATED TARGET ZONE

Roll 1D (a).

ROLL	WAVES
1-3	1 (b)
4,5	2 (b)
6	3 (b)

Notes: a) Poor or Bad weather over the target zone (from Table O-1) subtracts 1 from this roll.
b) Go to Table B-3.

B-3 ATTACKING FIGHTER WAVES

Roll 2D for each separate wave from B-1 or B-2.

ROLL   FIGHTER TYPES (a)—AREA OF ATTACK

11	109 6 High
12	Two 109's: 1:30 High and 9 Level
13	Three 190's: 12 High, 1:30 High, 3 High
14	Four 109's: 12 High, 10:30 High, 1:30 High, and 12 Level
15	Five 190's: 12 High, 10:30 Level, 9 Level, 3 High, and Vertical Dive (b)
16	NO ATTACKERS (c)
21	One 190: Vertical Dive (d)
22	Two 110's: 12 Low and 10:30 Low
23	Three 190's: 12 High, 3 Level, and 3 High
24	Four 109's: 12 High, 3 High, 3 High, and 9 Level
25	Five 190's: 12 High, 1:30 High, 3 High, 6 High, and 9 High
26	NO ATTACKERS (c)
31	110: Vertical Climb (e)
32	Two 190's: 10:30 High and 3 Level
33	Three 109's: 12 Level, 12 High, and 1:30 Level
34	190: 10:30 High; 110: Vertical Climb (e)
35	Two 190's: 12 Level and 1:30 Low
36	NO ATTACKERS (c)
41	109: 12 High
42	Two 109's: 12 Level and 1:30 High
43	190 12 High; Two 109's: 1:30 Level and 3 Level
44	Two 190's: 12 High and 12 Low; 109: 1:30 Level; 110: 6 Low
45	Two 109's: 10:30 Level and 12 Level; 110: 10:30 Low
46	NO ATTACKERS (c)
51	190: 10:30 High
52	Two 110's: 3 Level and 9 Low
53	Three 110's: 12 Low, 10:30 Level, and 6 Low
54	Four 109's: 12 Low, 12 Level, 12 High, and 9 High
55	190: 12 Low; Three 109's: 12 Level, 12 High, and 10:30 Level
56	NO ATTACKERS (c)
61	109: Vertical Dive (d)
62	109: 3 Low; 110: 1:30 Low
63	Three 190's: 10:30 High, 12 High, and 1:30 High
64	Four 190's: 12 Level, 1:30 Level, 3 Low, and 9 High
65	Five 109's: 3 Level, 3 High, 1:30 High, 6 High, and Vertical Dive (b)
66	RANDOM EVENTS: See rules section Random Events

Notes: a) 109 = Me 109, 110 = Me 110, and 190 = FW 190.
b) B-17 cannot fire at this fighter, nor may it be driven off by fighter cover.
c) Fighters are driven off by other B-17's. If out of formation, roll again.
d) Only the Top Turret or Radio Room guns may fire at this fighter (both must roll a 6 to hit), and this fighter may not be driven off by fighter cover.
e) Only the Ball Turret may fire at this fighter (it must roll a 3-6 to hit), and this fighter may be driven off by fighter cover.

SHELL HITS BY AREA (a)

Roll 2D per successful attacking fighter (b).

ROLL	12/ 1:30 10:30	3/9	6	VERTICAL DIVE	VERTICAL CLIMB
2	3	4	6	3	4
3	2	3	5	2	4
4	2	3	4	2	3
5	2	3	3	1	2
6	1	2	2	1	2
7	1	1	2	1	1
8	1	2	2	1	2
9	2	3	3	1	2
10	2	3	4	2	3
11	2	3	3	3	3
12	4	5	7	4	5

Notes: a) If the attacking fighter is a FW 190, multiply the number of shell hits by 1½ (rounding down). If the fighter was a Me 110, add 1 to the number of shell hits.
b) After determining the number of shell hits the B-17 takes, go to Table B-5 to find out where the shells hit.

B-6 SUCCESSIVE ATTACKS

Roll 2D for each fighter.

ROLL	SUCCESSIVE ATTACK AREA
2	6 High
3	9 Level
4	9 Level
5	12 Level
6	10:30 Level
7	12 High
8	1:30 Level
9	12 Level
10	3 Level
11	9 High
12	3 High

B-7 RANDOM EVENTS TABLE

Roll 2D.

ROLL   EVENT

2	Engine failure.
3	Formation casualties. Roll 1D: 1-3 = You are now the lead bomber; 4-6 = tail bomber.
4	Loose formation. Roll to determine enemy fighter waves in zone on Table B-1 or B-2 is +1.
5	Aggressive "Little Friends". Roll for fighter cover defense on Table M-4 is +1 for the remainder of the mission.
6	Tight formation. Roll to determine enemy fighter waves in zone on Table B-1 or B-2 is −1.
7	Rabbit's foot. You may re-roll any one die or dice roll.
8	Tight formation. See result #6 above.
9	Bad Luftwaffe communications.
10	Extreme cold. Roll 1D for each gun position: 1-5 = No effect; 6 = Gun jammed.
11	Ace for a day. Roll 1D: 1,2 = Engineer; 3,4 = Ball Gunner; 5-6 = Tail Gunner. This gunner +1 to hit on Table M-1 for remainder of the mission.
12	Mid-air accident.

Notes: See rules section Random Events for notes to the above results.
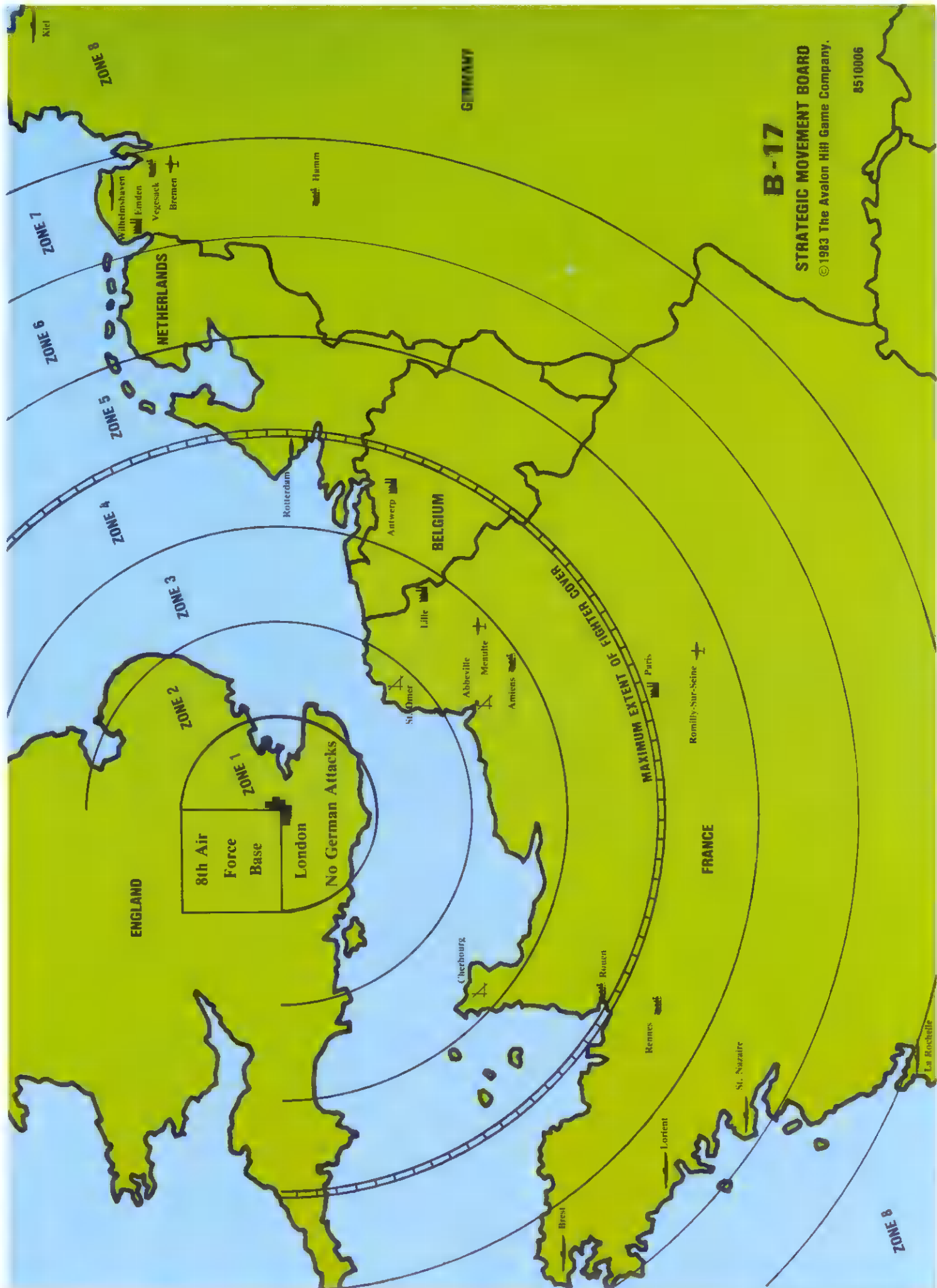
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B-17
STRATEGIC MOVEMENT BOARD
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B1-1 WINGS
Roll 2D per shell hit.

ROLL	HIT	EFFECT
2-3	Wing Root	1 wing root hit (a)
4	Wing Flap	Roll 1D: 1-3 = Flap inoperable (b); 4-6 = No effect.
5	Aileron	Roll 1D: 1-3 = Aileron inoperable (b); 4-6 = No effect.
6-8	Superficial Damage	No effect.
	Engines	Roll 1D: If port wing—1-3 = #1 engine; 4-6 = #2 engine. If starboard wing—1-3 = #3 engine; 4-6 = #4 engine. Roll 1D again: 1,2 = Superficial Damage; 3,4 = Engine out (c); 5 = Runaway engine (d); 6 = Oil tank hit. (e)
10	Fuel Tank	Roll 1D: 1-3 Outboard tank; 4-6 Inboard tank. Roll 1D again: 1,2 = Fire (f); 3,4 = Leakage (g); 5,6 = Self-seal, no effect.
11	Wing Root	See effect for roll of 2 or 3 above.
12	Landing Gear	Roll 1D: 1-3 = Brake out (h); 4-6 = Landing gear inoperable (i).

Notes: a) When a wing root has accumulated 5 hits over the course of a mission, the wing rips off and the crew must immediately bailout according to Table G-7.
b) If both the port and starboard wing flaps or ailerons are inoperable, the landing roll on Table G-9 or G-10 is -1.
c) Roll 1D: 1-5 = Prop feathered; 6 = Prop not feathered, B-17 must spend 2 turns per zone due to wind drag, and is out of formation (See rules sections Engines Out and Out of Formation.)
d) Roll 1 D: 1-5 = Prop feathered and engine out; 6 = Prop not feathered, engine out of control—crew must immediately bailout according to Table G-6.
e) Roll 1D: 1-2 = Engine fire (Each engine has 2 extinguisher charges per mission. Roll 1D: 1-4 = Fire out; 5,6 = Fire continues—try again. If second try fails, crew must immediately bailout according to Table G-6.); 3-4 = Leakage (Roll 1D: 1,2 = Engine must be shut off after 1 more zone of travel; 3,4 = Shut off engine after 2 more zones; 5,6 = Shut off engine after 3 more zones.); 5-6 = Self-seal, no effect.
f) Roll 1D: 1-5 = Fire continues, bailout, Table G-6; 6 = Explosion, bailout, Table G-7.
g) Roll 1D: (B-17 may travel the following number of zones, then bailout, Table G-6, or crash land, Table G-9 or G-10.) 1,2 = 4 zones; 3,4 = 5 zones; 5,6 = 6 zones. If this is the second separate tank hit, B-17 may go only 2 more zones. If this is the third separate tank hit, B-17 may only go 1 more zone.
h) Landing roll on Table G-9 -1.
i) If the landing gear on either or both sides is inoperable, landing roll on Table G-9 is -3.

B1-2 INSTRUMENTS
Roll 2D per shell hit on instruments.

ROLL	AREA HIT	EFFECT
2	Automatic Pilot	Bomb Run roll on Table O-6 -2 (a).
3	Landing Gear	Landing roll on Table G-9 -3.
4	Intercom System Out	Mission may be aborted (b).
5	Oxygen System	Drop out of formation to 10,000 ft in next zone (c).
6	Flaps	Landing roll on Table G-9 or G-10 -1 (d).
7	Ailerons	Landing roll on Table G-9 or G-10 -1 (d).
8	Elevators	Landing roll on Table G-9 or G-10 -1 (d).
9	Rudder	Landing roll on Table G-9 or G-10 -1 (d).
10	Propeller Feathering	Crew must immediately bailout Table G-6 in the case of a subsequent runaway engine result from Table B1-1.
11	Engine Fire Extinguishers	Engine fire extinguishers out. Crew must immediately bailout Table G-6 if engine fire occurs.
12	Electrical System	Crew must immediately bailout Table G-6.

Notes: a) If intercom system also out, Bomb Run is automatically off target.
b) See rules section Aborting Missions. Also, all gunners now must roll a 6 to hit attacking fighters, except Tail gunners which will hit on 5 or 6.
c) See rules sections Oxygen Out and Out of Formation.
d) Disregard the landing roll modifications for lost controls of the flaps, ailerons, and elevators, if both the port and starboard parts of these systems are already inoperable. If the rudder is already inoperable, ignore the landing roll modification for loss of the rudder's controls.

B1-3 HAND HELD EXTINGUISHERS
Roll 1D per attempt to extinguish fire.

ROLL	EFFECT
1-4	Fire out
5,6	Fire continues, try again (3 try limit)

There are 4 portable fire extinguishers in the B-17, represented by individual counters placed on the Crew Placement Chart. Each may be sprayed once and then it's empty. A crewman may not operate a gun during an attack in which he is fighting a fire. A crewman may immediately attempt 3 times to put out a fire (i.e., use up 3 extinguishers). If the fire is not out after the 3rd try, the crew must immediately bailout, Table G-6. Used extinguishers are removed from play.

B1-4 WOUNDS
Roll 1D per affected crew member.

ROLL	EFFECT
1-3	Light Wound: Crewman may continue duties unimpaired. (a)
4,5	Serious Wound: Crewman may not continue duties, may not bailout. (b)
6	KIA: Crewman killed in action.

Notes: a) A single light wound results in: Gunners may only hit fighters with a roll of 6; Bombardier loses his 11-25th mission bonus and his Bomb Run roll on Table O-6 is -1; Pilot and Co-Pilot lose their 11-25th mission bonus when landing (but if either hasn't taken 2 light wounds he may land the plane using his bonus); Bailout for the crewman on Table G-6 is -1. 3 light wounds = a serious wound. 4 light wounds = KIA. Light wounds + serious wound = KIA.
b) After landing roll 1D for each serious wounded crewman for survival: 1 = Rapid recovery, may fly on next mission; 2-5 = Recovery, but may not fly any more missions; 6 = Wounds fatal, crewman dies.

B1-5 FROSTBITE
Roll 1D per affected crewman.

ROLL	EFFECT
1-3	Frostbite. (a)
4-6	No frostbite this turn.

Notes: a) See rules section Heat Out/Frostbite.
b) After landing, roll 1D for each frostbitten crewman separately: 1-3 = crewman may not fly any more missions; 4-6 = crewman recovers, may fly next mission.

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MISSION TARGETS

G-1 MISSIONS 1-5
Roll 1D.

ROLL	TARGET	TYPE
1	St. Omer	Airfield
2	Cherbourg	Airfield
3	Amiens	Rail Yard
4	Meaúlte	Aircraft
5	Abbeville	Airfield
6	Lille	Industry

G-2 MISSIONS 6-10
Roll 1D.

ROLL	TARGET	TYPE
1	Abbeville	Airfield
2	Meaulte	Aircraft
3	Lille	Industry
4	Rotterdam	Ship Yard
5	Antwerp	Industry
6	Rouen	Rail Yard

G-3 MISSIONS 11-25
Roll 2D.

ROLL	TARGET	TYPE	ROLL	TARGET	TYPE
11	St. Omer	Airfield	41	Lorient*	U Boats
12	Cherbourg	Airfield	42	St. Nazaire	U Boats
13	Amiens	Rail Yard	43	St. Nazaire	U Boats
14	Meaulte	Aircraft	44	St. Nazaire	U Boats
15	Abbeville	Airfield	45	Wilhelmshaven*	U Boats
16	Lille	Industry	46	Wilhelmshaven*	U Boats
21	Rotterdam	Ship Yard	51	Emden	Industry
22	Antwerp	Industry	52	Emden	Industry
23	Rouen	Rail Yard	53	Vegesack*	U Boats
24	Paris	Industry	54	Vegesack*	U Boats
25	Paris	Industry	55	Bremen	Aircraft
26	Romilly-S.-S.	Aircraft	56	Bremen	Aircraft
31	Romilly-S.-S.	Aircraft	61	Hamm	Rail Yard
32	Rennes	Rail Yard	62	Hamm	Rail Yard
33	Rennes	Rail Yard	63	La Rochelle*	U Boats
34	Brest	U Boats	64	La Rochelle*	U Boats
35	Brest	U Boats	65	Kiel*	U Boats
36	Lorient*	U Boats	66	Kiel*	U Boats

*Add 1 to die roll for flak occurence over target zone, Table O-1.

G-4 B-17 FORMATION POSITION

FORMATION POSITION		SQUADRON POSITION (Missions 6-25 only)	
Roll 2D.		Roll 1D.	
ROLL	POSITION	ROLL	SQUADRON
2	Lead Bomber	1,2	High
3-11	Middle	3,4	Middle
12	Tail Bomber	5,6	Low

G-5 FIGHTER COVER*
Roll 1D.

ROLL	COVER
1,2	Poor
3,4	Fair
5,6	Good

*Missions 1-5 are automatically GOOD fighter cover.

G-6 CONTROLLED BAILOUT
Roll 1D.

ROLL	EFFECT
1	Roll 1D: 1-5 Bailout OK; 6 = Crewman killed in accident.
2-6	Bailout OK.

G-7 BAILOUT FROM UNCONTROLLED PLANE
Roll 1D.

ROLL	EFFECT
1-5	No bailout, goes down with plane.
6	Bailout OK.

Notes: a) Roll for each crewman separately.
b) Seriously wounded crewmen may not bailout.
c) If bailout is over Germany or the Netherlands, crewman is automatically captured.
d) If bailout is over France or Belgium, for each crewman who lands safely roll 1D: 1-5 = Captured; 6 = returned to England by the Underground in time for next mission.
e) If crewmen bailout over water, roll 1D also on Table G-8.
d) A roll of 6 is always "Bailout OK", even if the light wounds modifier is in effect.

G-8 BAILOUT OVER WATER
Roll 1D.

ROLL	EFFECT
1-4	Dies of drowning, exposure, etc.
5,6	Rescued

Notes: Roll 1D for each crewman separately.
b) If the radio was not operating, all crewmen bailing out over water die.

G-9 LANDING ON LAND
Roll 2D.

ROLL	EFFECT
−3	Crew dies and B-17 wrecked.
−2	Crew rolls for wounds, Table B1-4, die roll +1; B-17 wrecked.
−1	Crew rolls for wounds, Table B1-4; B-17 wrecked.
0	Crew safe and B-17 irrepairably damaged.
1	Crew safe and B-17 repairable by next mission.
2-12	Crew and B-17 safe.

G-10 LANDING IN WATER
Roll 2D.

ROLL	EFFECT
2-3	Crew lost
4-12	Crew rescued

Notes: a) A roll of 12 is always "crew safe" regardless ▪ negative modifiers in effect.
b) If Pilot and/or Co-Pilot are on 11-25th mission, die roll is +1.
c) If landing ▪ Germany or Netherlands, entire crew is captured.
d) If landing ▪ France or Belgium, for each surviving ▪▪▪▪▪▪ roll 1D:
1-5 = Captured; 6 = rescued by Underground and returned to England ▪ time ▪▪ next mission. (Seriously wounded crewmen are automatically captured.)
e) If roll is 0 ▪ less and bombs are still aboard, roll 1D: 1-5 = No effect; 6 = Explosion. B-17 and all remaining crewmen destroyed.
f) If the ▪▪▪▪ and Co-Pilot ▪▪▪ dead or seriously wounded and another crewman is attempting to land the B-17, landing roll is − 11.
▪ If landing in water with the radio out, landing roll is − 6, ▪ ▪▪▪ of formation.
h) If landing with only 1 engine operating, landing roll is − 3.
i) If landing with ▪▪ engines operating, landing roll is − 7 (If landing in water, − 4).
j) If landing on land not in England, landing roll is − 3.

G-11 FLIGHT LOG GAZETTEER

TARGET CITY	ZONE 2	ZONE 3	ZONE ▪	ZONE 5	ZONE ▪	ZONE 7	ZONE ▪
Abbeville	− 2/W	+ 1/F					
Amiens	− 2/W	0/F					
Antwerp	− 2/W	− 1/B	0/B				
Bremen	− 2/W	− 1/W	− 1/W	− 1/W	− 1/W	0/G	
Brest	− 3/W	− 2/W	− 1/W	− 1/W	+ 1/F		
Cherbourg	− 2/W	0/W-F					
Emden	− 2/W	− 1/W	− 1/W	− 1/W	− 1/W	0/G	
Hamm	− 2/W	− 1/W	− 1/W	0/N	0/N	0/G	
Kiel	− 2/W	− 1/W	− 1/W	− 1/W	− 1/W	− 1/W	0/G
La Rochelle	− 2/W	− 1/W	0/F	0/F	0/F	0/F	0/F
Lille	− 2/W	0/F					
Lorient	− 2/W	− 1/W	− 1/W	0/F	0/F		
Meaulte	− 2/W	0/F					
Paris	− 2/W	0/F	0/F	0/F			
Rennes	− 2/W	− 1/W	0/F	0/F			
Romilly-sur-Seine	− 2/W	0/F	0/F	0/F			
Rotterdam	− 2/W	− 1/W	0/W-N				
Rouen	− 2/W	− 1/W	0/F	0/F			
St. Omer	0/W-F						
St. Nazaire	− 2/W	− 1/W	0/F	0/F	+ 1/F		
Vegesack	− 2/W	− 1/W	− 1/W	− 1/W	− 1/W	0/G	
Wilhelmshaven	− 2/W	− 1/W	− 1/W	− 1/W	− 1/W	0/G	

Notes: a) The number to the left of the slash is the modification, if any, to the roll on Table B-1 when determining the number ▪ German fighter waves in ▪▪▪ zone.
b) The letter(s) to the right of ▪▪▪ slash is ▪ code identifying whether ▪▪▪ zone is over water or ▪ particular nation. W = Water; ▪ = Belgium; ▪ = France; N = Netherlands; G = Germany. This information ▪▪▪▪▪ into play when a B-17 is forced down in ▪ zone ▪▪ the crew must bailout. Where a ▪▪▪▪▪ shows two code letters, the player has ▪ choice of where to come down ▪ the B-17 is under control.
c) Rescued crewmen who ▪▪▪▪▪ down into water in Zones 6 or 7 ▪▪▪ captured. Those coming down in Zones 2-5 are returned to England.

O-1 WEATHER
Roll 2D. (c)

ROLL	WEATHER OVER TARGET ZONE	WEATHER OVER BASE
2	Bad (a)	Bad (a)
3	Poor (b)	Poor (b)
4-10	Good	Good
11	Poor (b)	Poor (b)
12	Bad (a)	Bad (a)

Notes: a) Bad Weather causes −2 on Bomb Run roll on Table 0-6 and −2 on Landing roll on Tables G-9 or G-10.
b) Poor Weather causes −1 on Bomb Run roll on Table 0-6 and −1 on Landing roll on Tables G-9 or G-10.
c) Both Poor and Bad Weather cause −1 on Table B-2 Number of German Fighter Waves in Designated Target Zone, −1 on Table 0-2 Flak Over Target, and −1 on Table Fighter Cover Defense.

O-2 FLAK OVER TARGET
Roll 1D.

ROLL	AMOUNT OF FLAK*
1	No Flak
2	Light Flak
3	Light Flak
4	Medium Flak
5	Medium Flak
6	Heavy Flak

*After determining amount of flak, go to Table 0-3 Flak to Hit B-17 to see if the B-17 is hit.

O-3 FLAK TO HIT B-17
Roll 2D three times under the appropriate column.

ROLL	HEAVY	MEDIUM	LIGHT
2	Hit	Hit	Hit
3	Hit	Hit	Miss
4	Miss	Miss	Miss
5	Hit	Miss	Miss
6	Miss	Miss	Miss
7	Hit	Hit	Miss
8	Miss	Miss	Miss
9	Hit	Miss	Miss
10	Miss	Miss	Miss
11	Hit	Miss	Miss
12	Hit	Hit	Hit

Note: For each hit, roll once on Table 0-4 Effect of Flak Hits.

O-4 EFFECT OF FLAK HITS
Roll 2D for each hit from Table 0-3.

ROLL	NUMBER OF SHELL HITS
2	Burst Inside Plane (a)
3	1 (b)
4	4
5	3
6	2
7	1
8	2
9	1
10	4
11	1
12	4

Notes: a) Roll once on Table 0-5 to determine the section of the plane affected by the burst, and see Rules section 19.0 for effects of BIP.
b) For each shell hit, roll once on Table 0-5 to determine the section of the B-17 damaged.

O-5 AREA AFFECTED BY FLAK HITS
Roll 2D per shell hit from Table 0-4.

ROLL	AREA AFFECTED
2	Bomb Bay (P-3)
3	Port Wing (B1-1)
4	Radio Room (P-4)
5	Tail (P-6)
6	Port Wing (B1-4)
7	Tail (P-6)
8	Starboard Wing (B1-4)
9	Waist (P-5)
10	Nose (P-1)
11	Starboard Wing (B1-4)
12	Pilot Compartment (P-2)

Notes: After finding the area affected by each flak shell hit, go to the table for that area to determine the damage done there.

O-6 BOMB RUN
Roll 1D.

ROLL	EFFECT
1	Off Target
2	Off Target
3	On Target
4	On Target
5	On Target
6	On Target

Notes: a) If Bombardier on 11-25th mission, add 1 to die roll.
b) If B-17 hit by flak over target, subtract 1 from die roll.
c) If Bombardier KIA or seriously wounded, Bomb Run automatically Off Target.
d) After determining whether the bombs were On or Off Target, go to Table 0-7.

O-7 BOMBING ACCURACY
Roll 2D to determine the percentage of bombs hitting within 1000 feet of aiming point.

	ON TARGET		OFF TARGET
ROLL	PERCENTAGE	ROLL	PERCENTAGE
2	75	2	10
3	60	3	5
4	30	4	0
5	20	5	0
6	30	6	0
7	40	7	0
8	30	8	0
9	20	9	0
10	30	10	0
11	50	11	5
12	88 + 2D	12	10

B-17: ERRATA AND CLARIFICATIONS

1. Table BL-3 should read "Roll 1D per attempt to extinguish fire."

2. Although there are six fire extinguisher counters provided, only five should be in play.

3. Table M-2, under Note (a), "FE 190" should read "FW 190". Also add:
   2 or more FCA = FBOA
   2 or more FBOA = Destroyed
   FCA + FBOA = FBOA

4. Fighter attack die roll modifiers are cumulative for additional FCA and FBOA hits, except that a roll of "6" always hits. Remember that a fighter destroyed (even by an accumulation of hits) does not get to attack.

5. Recovery from frostbite is correct as shown in Note (b) to Table BL-5, not as shown in Rules Section 11.0.

6. On Table G-3, both Brest and St. Nazaire should be marked with an asterisk for increased flak occurence.

7. In the Rules Section 18.0, Random Events, the Random Events Table is incorrectly listed as "G-11", when it should be "B-7".

8. The notes to Table G-7 apply to Tables G-6 and G-8 as well.

9. If the Navigator is KIA or Seriously Wounded, Table P-1 Note (b) applies.

10. On Table B-5, 6 O'Clock High, Roll "11", "Walking Hits/Fuselage" should be Type (a).

11. In the rules on page 11, Section 6.4 should read "3–1 = 2 = One Wave."

12. There are **no** landing dice roll modifiers for having 1 or 2 engines out.

13. The B-17 takes a hit on Table P-1 (Nose Compartment), #10, rolls a second die "4-6" = Bomb Run –3. If this damage was done by flak the Bomb Run roll is now –4 (–3 for the damage, and –1 for being hit by flak during the Bomb Run).

14. If the "No Attackers" result is rolled on Table B-3, then the additional fighters which attack the lead and tail position bombers do not appear.

15. Spray fire is directed at a specific clock position (6 O'Clock **High**), not at individual attacking fighters. If more than one fighter attacks from this position (during a successive attack) roll once on Table M-5 for each.

16. If a B-17 takes a fuel tank hit which doesn't leave it enough fuel to bomb the target and return, the B-17 may abort the mission and still count it towards the 25 mission campaign.

17. A B-17 is never required to spend more than 2 Turns/Zone.

18. Table BL-1, Roll "10", Case (g) should say "4, 5, or 6 **Turns**" left, not Zones.

19. If a fuel tank which is already leaking is hit again, roll for damage normally (either fire, leak or self seal). The previous hit has no effect.

20. If an engine fire is put out by extinguishers, the engine is out and feathered.

21. If the Pilot Compartment Windshield is knocked out (Table P-2, #11), the heat is out for this compartment (Pilot and Co-Pilot heat out).

22. Rouen is in Zone 4, not in Zone 5 as shown on Chart G-11, Flight Log Gazetteer.

23. A B-17 can be irreparably damaged only by a flak BIP or crash landing.

24. Crew members may voluntarily bail out over England (Table G-6) before attempting a dangerous landing.

25. Vegesack is a U-Boat type target with increased flak (+ 1 to die roll on Table O-2).

26. When a B-17 lands in England with no landing gear, an additional roll is made for irreparable damage. If the plane does not crash, roll 1D: 1-3 = B-17 is reparable; 4-6 = B-17 irreparably damaged.

27. The Radio Operator must be in the Radio Room to consider the radio operational and avoid the negative modifier for landing.

28. The altitude drop required by the loss of oxygen does not occur during the turn in which the damage takes place. Begin the next turn at 10,000.

29. When a result of "2" is rolled on Table G-11 Random Events, roll for feathering the affected engine according to Note (c) Table BL-1.

30. Any guns jammed by extreme cold (from a result of "10" rolled on Table G-11 Random Events) are automatically unjammed if the B-17 drops to 10,000 feet.

31. A B-17 which must make a mandatory crash landing its next turn must resolve fighter attacks normally before landing.

32. When entering the Designated Target Zone roll for weather before determining Fighter Cover (Table G-5) or attacking enemy fighters waves (Table B-2).

33. The Ace bonus does apply to Tail Guns passing shots (see 9.2). The leading gunner ace of the 8th Air Force was a Tail Gunner proficient with this technique (12 credited kills).

34. On Table G-8, Bailout Over Water, Note (b) applies only if the B-17 is out of formation when bailout occurs.

35. On Chart G-11, Flight Log Gazetteer, Note (a) applies to Table B-2 also.

36. On Table O-5, Area Affected by Flak Hits, for the results "6", "8", and "11", refer to Table BL-1, Wings, not BL-4 as shown.

37. Add this note to Tables G-7 and G-8: "Slightly wounded crewmen, die roll –1".

P-5 WAIST
Roll 2D per shell hit.

ROLL	AREA HIT	EFFECT
2	Oxygen Supply Hit	Roll 1D: 1,2 = Port Gunner; 3,4 = Starboard Gunner; 5 = Ball Gunner; 6 = Fire, Waist oxygen out. Roll to extinguish fire on Table B1-3. (a)
3	Armament	Roll 1D: 1-3 = Port gun out; 4-6 = Starboard gun out.
4,5	Superficial Damage	No effect.
6	Port Gunner	Roll for wound on Table B1-4.
7	Superficial Damage	No effect.
8	Starboard Gunner	Roll for wound on Table B1-4.
9	Ball Turret	Roll 1D: 1,2 = roll wound for gunner on Table B1-4; 3 = gunner's heat out (b); 4,5 = guns out; 6 = turret mechanism inoperable (c).
10	Waist Gunners	Roll wound for each on Table B1-4.
11	Suit Heaters	Roll 1D: 1-3 = Port Gunner heat out; 4-6 = Starboard Gunner heat out. (b)
12	Control Cables	See effect for roll of 12 on Pilot Compartment Table P-2.

Notes: a) See rules section Oxygen Out.
b) See rules section Heat Out/Frostbite.
c) Gunner is trapped in turret, may not fire guns, and may not bail out. If landing gear is inoperable, gunner is automatically KIA on landing.

P-6 TAIL SECTION
Roll 2D per shell hit.

ROLL	AREA HIT	EFFECT
2	Suit Heater	Tail Gunner's heat out. (a)
3	Tailwheel or Autopilot Mechanism	Roll 1D: 1-3 = Tailwheel damaged, landing roll on Table G-9 -1; 4-6 = Autopilot mechanism inoperable, Bomb Run on Table O-6 -2.
4	Tail Turret	Tail guns inoperable.
5	Tail Gunner	Roll for wound on Table B1-4.
6	Superficial Damage	No effect.
7	Rudder	Rudder takes 1 hit. With 3 hits rudder is inoperable, landing roll on Table G-9 or G-10 -1.
8	Superficial Damage	No effect.
9,10	Tailplane	Roll 1D: 1,2 = No effect; 3 = Port elevator inoperable (b); 4 = Starboard elevator inoperable (b); 5 = Port tailplane root hit (c); 6 = Starboard tailplane root hit (c).
11	Oxygen Supply Hit	Roll 1D: 1-5 = 1 oxygen supply hit; 6 = Fire, and Tail oxygen out (d). Roll to extinguish fire on Table B1-3.
12	Control Cables	See effect for roll of 12 on Pilot Compartment Table P-2.

Notes: a) See rules section Heat Out/Frostbite.
b) If both elevators are inoperable, landing rolls on Tables G-9 and G-10 are -1.
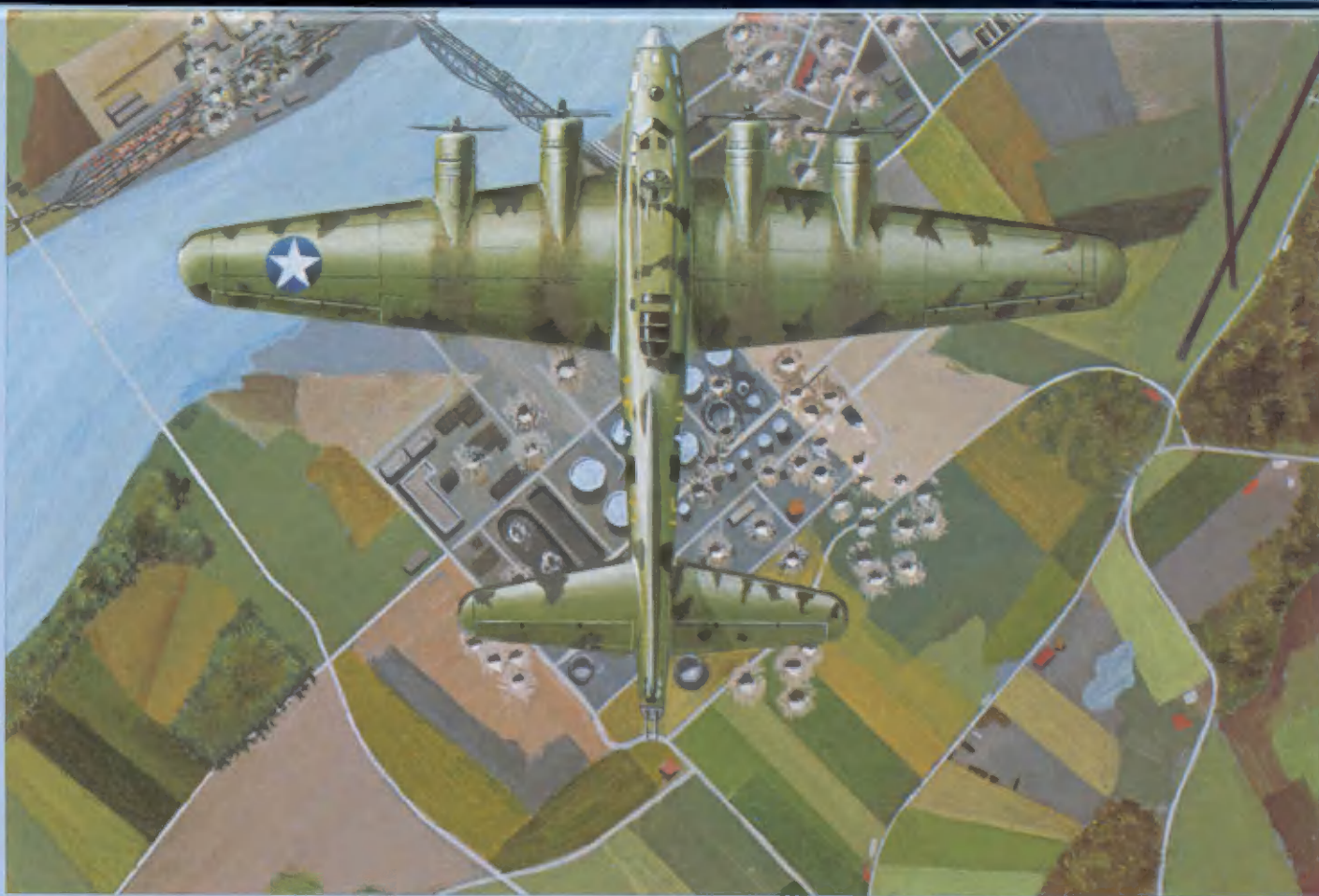c) If tailplane root accumulates 3 hits during mission, tailplane rips off. If 1 tailplane is off, landing rolls on Tables G-9 and G-10 are -1; if both tailplanes come off, bailout immediately on Table G-7.
d) See rules section Oxygen Out.

A portion (reduced in size here) of 11"x16" mounted gameboard

A large heavy bomber passes outward bound from England over the French coast through the thin, cold air at 21,000 feet. Inside, the ten men of the crew finger their guns, listen to the roar of the engines, and scan the sky for the small black dots which will bring battle. It is late fall 1942. The plane is a B-17 Flying Fortress, known to those who fly her, defend her, and depend upon her, as the **Queen of the Skies.**

B-17: Queen of the Skies is The Avalon Hill Game Company's new strategy game which re-creates the bombing missions and aerial combat of the B-17 (model F) bombers of the U.S. Eighth Air Force over Europe between November 1942 and May 1943. This was the critical initial period for the American heavy bombers, when the green crews had to quickly learn their jobs and prove the feasibility of daylight bombing.

B-17 is designed primarily as a **solitaire** game, pitting you and your crew against the German air defenses. (A second player may optionally control the enemy fighters.) Your goal is to complete 25 missions and earn that ticket home.

Each mission begins by selecting the target city. The B-17 marker is then moved across the strategic map board, zone by zone, from England to the target and back. In each zone, however, there is the chance that enemy fighters will appear. Die rolls determine the number, type, and position of the fighters. You must allocate defensive machine gun fire, hoping to knock down the fighters or spoil their aim. After the bomber fires, the fighter's get their chance. Charts are consulted to determine if hits are made, where the damage is, and how serious. The Queen is an incredibly tough plane and can take a lot of punishment, but there is always the chance of that lucky hit that will bring her down. As the mission grinds on, you start to sweat—wounded crewmen, low ammunition, burned out engines, oil leaks, and more enemy fighters.

Playing Time: 15 minutes to 1 hour

Complexity Rating (from 1 to 10, 10 the highest): 3

"Forget about 25 missions, pal, let's just get home from this one."

ME109

Messerschmidt Counter for use on gameboard

Components:
11" x 16" Game Board (mounted)   Crew Placement Chart
88 Die Cut Markers   Strategic Movement Board
Enemy Fighter Cards   Rulebook
Mission Record Sheet Pad   2 Dice

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B-17